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lp

ANALOG HIFI AND VINYL CULTURE

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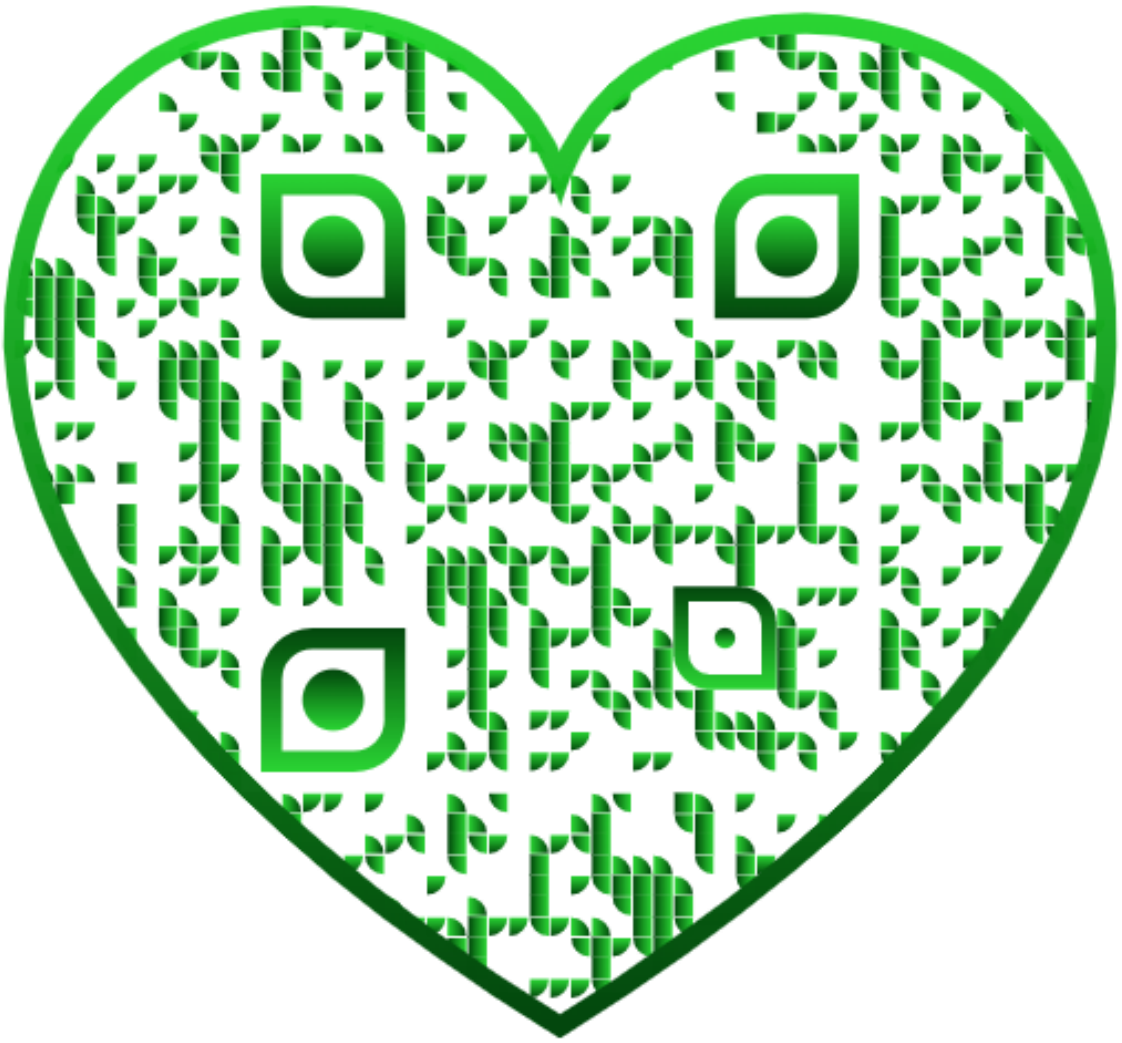

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LP International

For you vinyl enthusiasts

Welcome to the second issue of LP International, our magazine for vinyl enthusiasts all over the planet. Issue number one from last autumn sparked quite some interest in the record loving community and told us that we're on the right track with this publication.

So you will again find extensive reviews of high class equipment mainly intended for, but not necessarily limited to the reproduction of vinyl records. There's reviews of two high class cartridges, three turntables, and two phono stages – this is of course intended for vinyl playback only. The amplifiers and loudspeakers featured on the following pages may of course satisfy more general listening preferences.

This might be of some meaning especially these days, where vinyl supplies run increasingly short. As of now, there's easily a gap of half a year between the digital release of a new album and the corresponding vinyl issue. And, as the demand for fresh vinyl steadily increases, prices are on their way up. This is of course far from ideal, but should remind us of one of vinyl's greatest advantages: Over the last 75 years a vast amount of records have been made. And as a vinyl enthusiast, you are somewhat a preserver of the music from all those years. So never lose touch with the market for used vinyl, as there is definitely stuff out there that matches your musical taste and may still be really affordable.

Holger Barske, Chefredakteur

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A special kind of tame

Be it alphabetically sorted or by genre – finding a certain disc in a substantial vinyl or CD collection may easily turn into a time consuming task. Especially when the lighting isn't great, those slim backs of record sleeves printed with mostly poor contrast are hard to identify. Lucky are those who can at least remember the colours of the edges, although they don't necessarily match those of the rest of the cover.

If you don't want to spend more time than necessary with your head tilted, „arTabs" may be a good means of assistance for you. Given their excellent readability from up front, they offer a very good overview over the whole collection.

The high quality stainless steel design helps avoiding a clinical character of an archive solution. The markers fit every kind of shelf, take very little space due to the low material thickness, and fit even inclined record stacks due to their shape. They can be easily inserted and re-inserted and integrate harmonically with every type of environment.

The basic set „Alpha" is comprised of 27 tabs with all of the alphabet's 26 letters. Additionally, there is a star symbol serving as a „joker". It can be used as a universal marker for a category, that often may be difficult to tie to a specific letter, for example music samplers.

As of mid 2022, there will be coloured variants and special genre symbols to broaden the offer. As of now, the „Alpha" set can be ordered for 128 Euros via artab.de.

Contact: Oliver Mehlaff, Köln
Phone: 0049221 99874664
Web: artab.de

Nubert's nuPro SP Active Speakers

With the compact nuPro SP-200 and the slim nuPro SP-500, the Swabian hi-fi pioneers from Nubert are introducing two new pairs of active speakers that combine ease of use, homely design, and excellent sound to create an irresistible entertainment ensemble. Nubert is adding a new series to its award-winning nuPro range of active loudspeakers. The well-known and proven models of the X-generation, which inspire audio professionals and music fans with the highest demands, are now joined by the two active sound pairs nuPro SP-200 and SP-500.

The compact speaker duo nuPro SP-200 and the tall floor-standing speakers nuPro SP-500 appeal to price-conscious hi-fi enthusiasts, movie buffs, music lovers, and gamers looking for modern active speakers with high-resolution sound quality, easy operation, and future-proof connectivity. The two new additions combine the functionality of an up-to-date stereo system in the stylish form of two pairs of speakers. Both models come as a pair and are coupled via a signal cable for stereo operation. Setup and connection are made in no time. Control is either via the supplied valuable remote control or with the help of a rotary knob on the master speaker, which also accommodates all sources and the power supply. A translucent LED ring provides information about the operating status and the selected settings. Among the many sound options are bass and treble control, adaptive loudness switching, and Nubert's successful „listening zone expansion" for more expansive stage imaging and clever „Voice+" algorithm that improves speech intelligibility for movies and TV shows.

The nuPro SP-200 and nuPro SP-500 are available to order now from Nubert direct sales at pair prices of EUR 845 and EUR 1365, respectively.

Contact: Nubert, Schwäbisch Gmünd
Phone: 07171 87120
Internet: nubert.de

Fresh Breeze – Linlai Tubes from BTB

After the Chinese tube factory Shuguang has been in lockdown since 2019, a few engineers at the tube manufacturer PSVANE set out to create new tubes for the HiFi and high-end market. The goal here is not to serve the mass market within the niche but to establish a mark in the boutique tube amplifier sector. This cannot be achieved with large quantities but with selected tube types, a good team, quality awareness, quality control, and high-quality raw materials.

The "captain" of the new brand is former Chinese military veteran S. J. Li. He joined the Northern Chinese Navy at a young age, gaining his first experience with electron tubes for military technology. Since the Chinese armed forces at sea also used Western tubes, Li developed a good understanding of Western quality and requirements. After leaving the military, Li worked for several years at the Chinese tube state-owned enterprise Shuguang until he reached the position of vice president for production. Due to his strict management style and high quality standards, he is today the ideal man for a quality-conscious tube production that should also meet the demands of western audiophile listeners. In the beginning, the well-known tube types 300B, 845, 211, and 274B are in production. For the future also pentodes like EL34, 6550, KT88, KT120, and KT150 are planned; the EL34 is currently under development and should start soon. Also, the small-signal double triodes like ECC83, 12AX7, and ECC82 are already finished. These are a valuable replacement for the 12AX7T2 and 12AX7 from FULLMUSIC. BTB is pleased to offer you the new Linlai tubes from the factory and wish you a live playback with the new brand tubes.

Contact: BTB Elektronik, Fürth
Phone: 0911 288585
Internet: btb-elektronik.de

Thorens TD 1500

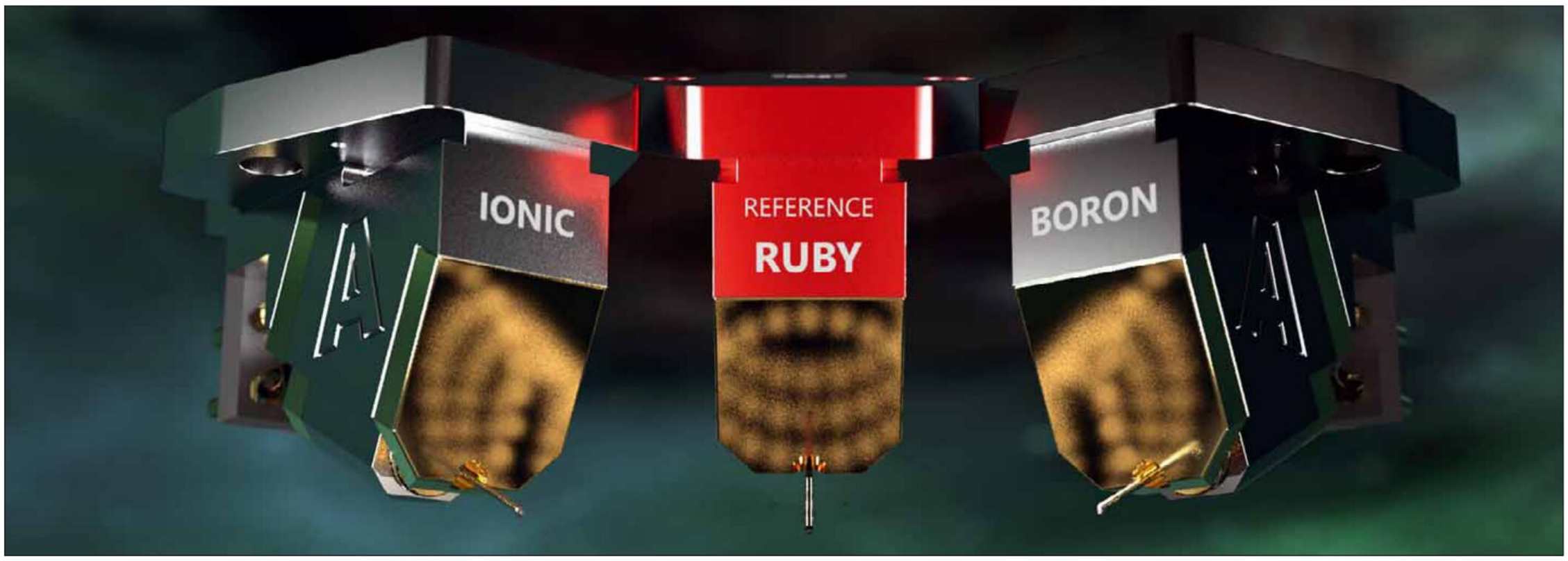
Bergisch Gladbach-based turntable manufacturer Thorens presents another tribute to its past with the TD 1500, but one with a few special features. With this model, Thorens is paying homage to its heritage in the form of the TD 150 model, which was launched in 1965. A spring-loaded sub-chassis and an inner platter driven by a flat belt were widely used for the first time. The TD 1500 takes up the design language of the classic. In connection with the likewise brand-new TP 150 tonearm, a purely manually operated device has been created that should undoubtedly be a worthy descendant of the TD 150. The device is scheduled to go on sale in December and will be offered with an Ortofon 2M Bronze cartridge for EUR 2,000.

Contact: Thorens, Bergisch Gladbach
Telephone: 02204 8677720
Internet: thorens.com

Avid Introduces a Cartridge Family

The British company Avid, known in our country primarily as a manufacturer of turntables, has introduced its cartridges. The line includes three models that Avid itself developed. The goal with the cartridges, just as with the company's turntables, was to completely isolate the sampling process from external influences to enable the lowest possible interference in playback. All three cartridge models are classic low-output MCs with a nominal output voltage of 0.32 millivolts. They are named „Iconic," „Boron," and „Ruby," the names being based on the materials of the stylus cantilevers. Retail prices range from EUR 2,500 to EUR 7,000.

Contact: IDC Klaassen, Lünen
Phone: 0231 9860285
Internet: idc-klassen.com



Potent Cayin Integrated Tube Amplifier

In the new single-ended class A tube integrated amplifier CS-805A from Cayin, two 805A output tubes deliver a powerful 2x 50 watts. For the voltage amplifier stage, the classic double triodes of type 6SN7 are used, in the driver stage for the 805A output tubes, even exquisite 300B work. Three pairs of line inputs are provided on the rear panel of the 38-kilo are doing their job. They are supplemented by an additional pair of inputs for connecting an external preamp. Thus, the CS-805A can also be used as a power amplifier or integrated into home theater systems with AV processors. The CS-805A features a high-quality headphone output with excellent sound characteristics.

Users can easily adjust the bias of the 805 tubes via the integrated bias indicator. With a so-called Hum Balance control, the user can adjust the 300B tubes to the optimum level from the outside. On the remote control, the degree of negative feedback can be adjusted between 0 and -3dB to adapt the sound character of the amplifier to individual listening habits. At 0dB, the Cayin CS-805A exhibits an open, fluid sound with plenty of detail, while at -3dB, playback appears smooth, precise, and controlled. The unit is available now for EUR 6400 from the Cayin Shop and select retailers.

Contact: Cayin Audio,
Glashütten-Schlossborn, Germany.
Telephone: 06174 9554412
Internet: cayin.com

Octopus light – Record Clamp by bFly Audio

With the Octopus light, bFly-audio has a new universal solution to clamp down records. The Octopus is a modular concept, where you can choose the function (weight or clamp) and the shape of the knob (cylindrical or spherical). The colors can be combined almost freely. Even for the logo, a high-quality coinage, you can choose between silver or copper patinated.

The Octopus is available in different weight classes so that you can choose the adequate weight for every turntable, whether mass drive or sub-chassis. By exchanging the mandrel holder, the Octopus becomes either a clamp or a weight, i.e., a pure weighting device. The use of a clamp is beneficial with warped LPs. By turning the knob, the Octopus light is fixed firmly to the turntable's spindle.

The integrated absorber concept of the Octopus was newly developed based on previous experience. It deals with both the natural vibrations of the LP and vibrations originating from the mandrel or motor of the turntable.

The Octopus Light weighs 230g or 300g depending on the pommel, and prices start from 449 Euro.

Contact: bFly Audio, Augsburg
Telephone: 0821 9987797
Internet: bfly-audio.de

Analog Dreams from the Design Professional

Even though the name pops up now and then, Helmut Thiele has been known primarily to industry insiders. This should now change thoroughly

TT
01

Can – Tago Mago

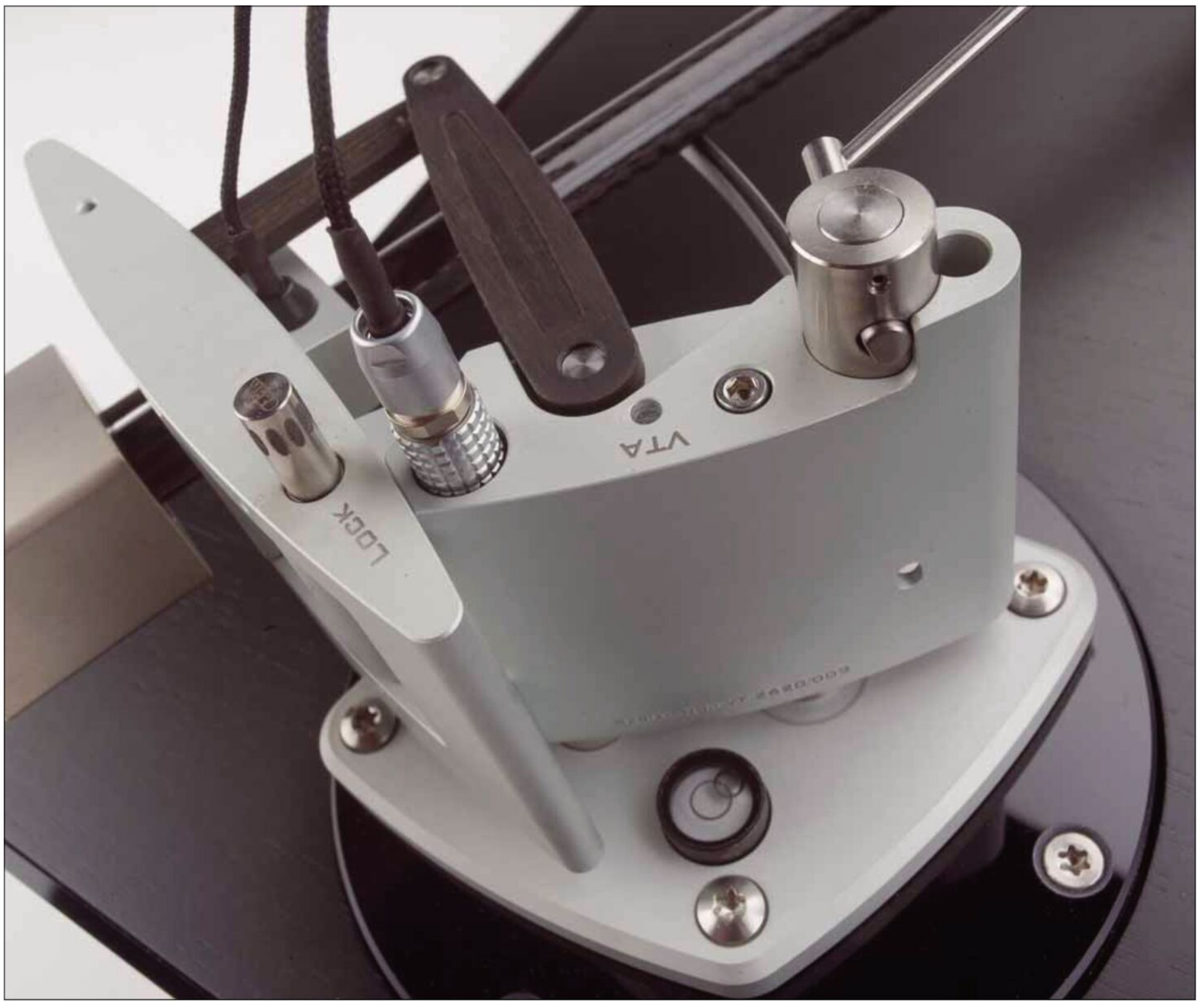
Music

Can
Tago Mago

Cigarettes After Sex
S/T

Paul Simon
Graceland

Chilly Gonzales, Jarvis Cocker
Room 29



This is the tricky lever mechanism that shifts the tonearm's base point

Helmut Thiele is a trained industrial designer with a long history in product design. As one of the few members of his profession, he has specialized in consumer electronics and, over the years, has designed a whole range of exciting products for the high-quality hi-fi sector as well. Among them are such exciting products as Acapella speakers, Thorens turntables, and Excalibur cartridges. For me, the versatile man has the advantage of working within cycling distance on the other side of the Rhine. So I had the opportunity to participate relatively early in the „launch“ of the first products under his name: With the Thiele TT01 / TA01, there is now a fine turntable/tonearm combo bursting with original ideas. The package costs not quite beginner-compatible 19000 EUR but has a lot to offer. It‘s a belt-driven turntable that serves as the basis for a track misalignment-corrected rotary tonearm, but of course, it can also be combined with other tonearms. The components can be purchased individually for EUR 9500.

Power supply? External, as usual nowadays

The turntable is not a real heavyweight despite its considerable dimensions (51 centimeters wide, 40 deep). Thiele refrains from the extensive use of metal and filters out disturbing vibrations with specific damping measures. The base of the pleasantly simple styled player follows

the „Constrained Layer Damping“ principle, in which hard material layers are connected via highly damping materials, which then „catch“ all vibrations. In the case of the TT01, this structure has three layers. The three feet, which can be finely adjusted from above without tools, engage with the lowest layer. The drive motor, the motor control, and the connection terminal are also attached here. The middle level serves only as a mounting plate for the tonearm. The top layer supports the platter bearing and the control panel. All three layers are made of different wood materials – including bamboo – and are connected with a highly dampening glue.

The result is effective isolation of all critical components from each other, the merits of which you can hear immediately. On the outside, the structure is covered with plastic and aluminum so that nothing is visible of the actual sandwich structure. The platter of the TT01 is a two-piece assembly consisting of an aluminum outer ring and a plastic inner part. This is no arbitrarily heavy material battle but a presumably cleverly dimensioned solution, where the mass sits where it belongs – namely on the outside. The platter rests on a large metal inner platter, with the drive belt running along its outer edge. Thus, we have two plastic-to-metal material transitions. Any bearing noise should have little chance of reaching the pickup zone here. On top of the platter lies a leather mat that is rough and soft on the bottom and smooth and hard on the top.

A moderately sized bearing axle protrudes from the subplate and carries a ceramic ball at the end. The whole thing is grease-lubricated in a bronze sleeve and runs very smoothly. The motor is a synchronous type whose speed is practically invariably dependent on the frequency of the controlling AC voltage. The motor is supplied with high-quality power by specially developed electronics. It is operated via the three standard pushbuttons: 0, 33, and 45 revolutions. The fact that the damping concept of the device works very effectively is noticeable when handling it. It simply does not make any noise, even when touching

Teammates

Cartridges:
· Ortofon Windfeld Ti
· Lyra Etna

Phono Preamplifier:
· MalValve preamp three phono
· RCM BigPhono

Preamplifiers:
· NEM PRA5

Power Amplifiers:
· Silvercore Collector's Amp

Lautsprecher:
· DIY Focal / JBL

Opponents

Turntable:
· TechDAS Air Foce III / Reed 3p
· Clearaudio Master Innovation / Universal 9“

Elegant and simple: You can see the hand-writing of the professional designer

Proved to be a bull's eye under the TA01 headshell: the Ortofon Windfeld Ti

and operating it. To get into similar regions with conventional damping by mass, you must use considerable amounts of metal.

You've been furtively glancing at the back right corner of the turntable where this fascinating tonearm is mounted? Rightly so. You don't see something like the Thiele TA01 every day. You can call it a tangential tonearm, but it would be more correct to call it a track misalignment corrected rotary tonearm. In this case, it means that there is a classic straight tonearm tube whose pivot is shifted by a tricky lever mechanism so that the stylus is always perfectly perpendicular to the groove. The force driving the mechanism is that of the groove flank on the stylus, nothing else.

The tonearm is wired symmetrically and wants to be connected via XLR

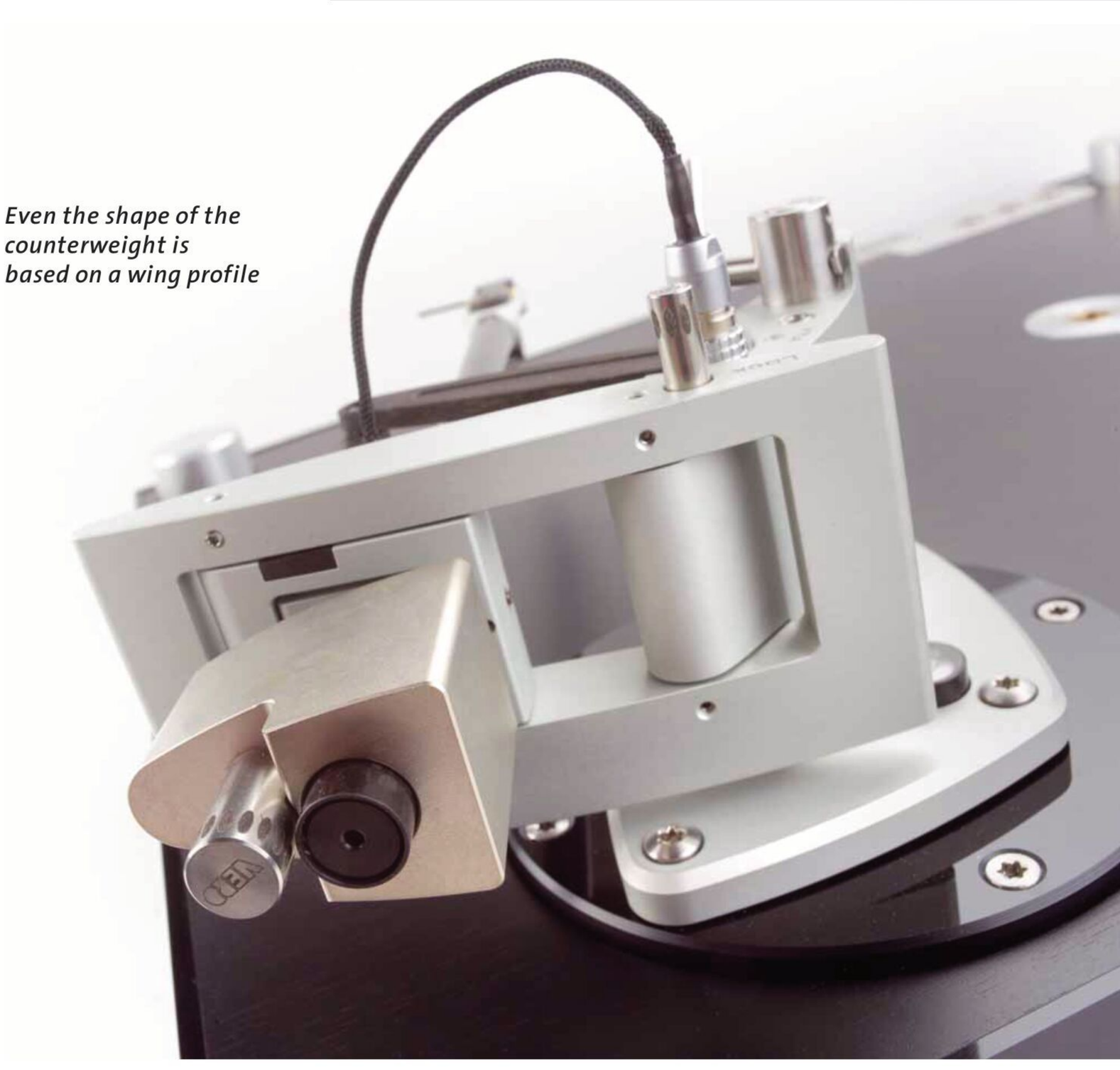
This is not an entirely new idea and one that spent many years on Helmut Thiele's shelf as a prototype. There are parallels to Frank Schröder's „LT" and Reed's motor-driven 5T. The arrangement works with four pivots. Two of them are fixed to the arm base; the other two are „moved" via levers. This involves moving the arm tube's gimbal bearing block close to the base so that the result behaves roughly like a nine- to ten-inch rotary tonearm – albeit one without significant tracking error. The two controlling levers are ebony, the rear „support structure" a disproportionately sturdier metal construction. In the shaping of all parts of the arrangement, one can

The solid metal headshell with ebony damping plates

A lever quadrant ensures a tracking error angle close to zero

sense Helmut Thiele's passion for flying: Contours that are based on a wing profile determine the image and lend the mechanism a very coherent look. Of course, the arm is conveniently height-adjustable in its entirety. The tonearm tube is much more than a simple carbon fiber tube. Two tubes are pushed into each other and damped using a gel layer. The massive headshell is stably screwed to a cone glued in front, and the connection allows the azimuth adjustment. At the top of the Headshell, another ebony element provides for damping, and there's also one in the counterweight at the other end of the action.

I have rarely seen a tonearm where resonances have so little opportunity as with Helmut Thiele's luxury design. You don't have to worry about the smoothness of the matter. The breakaway torques and friction losses of all bearings are tiny. In terms of operation, it takes a moment to get used to the unusual geometry. That's because the arm always moves forward a bit when



Even the shape of the counterweight is based on a wing profile

The sleeve of the platter bearing

you swing it over the plate. In practice, however, the whole thing works entirely without problems. The resulting maximum misalignment angle of the arrangement is negligibly tiny.

The arm ranks in the medium-heavy category, so it can be combined with various cartridges. Helmut Thiele himself mounted the Ortofon Windfeld Ti, which should earn its first spurs in his turntable and is still waiting for a separate appreciation - that will come, I promise. The cartridge certainly deserves it. Thiele's TT01 and TA01 demonstrate from the first note with the Ortofon a very mature and subtle character with loads of stability and cohesion. After all, without that, something like „Tago Mago" by the Krautrock veterans of Can wouldn't work. Here, however, the disc is an experience of the very first order. We hear „Halleluwah" on side two, where first of all, Jaki Liebezeit's stoic and mercilessly hard drum line stands out. Nicely separated from the rest of the action, the cult drummer works his way through over 18 minutes with impressive precision, creating the finely exposed framework for his colleagues' performance. It sounds dense, fiery, with that slightly brittle early seventies sound. Ortofon and Thiele take the listener into the studio, close to the action. The combination also demonstrates its completely non-technical, emotional character with the Texan rock band „Cigarettes After Sex," respectively, their self-titled debut album from 2017. I have rarely heard this dreamy album so laid back, at ease, and liberated.

The platter axle with ceramic ball for the vertical forces

Cartridge, turntable, and tonearm exhibit – and I never thought I would say this when an Ortofon MC is involved – a very slightly warm and very inviting character that very convincingly brings the virtues of the analog thing to the fore and also makes this record an almost sensual experience. Would you like another classic? While rummaging for interesting records, Paul Simon's stroke of genius „Graceland" falls into my hands, which I also haven't heard for a long time. And Helmut Thiele's record player rigorously convinces me that this was probably a mistake. This starts with the beautifully fluffy and upbeat title track and continues seamlessly with „I Know What I Know." Here, too, the Thiele turns out to be a master of dust-dry drumming with quite a bit of timbre, as was indicated earlier. The funky „You Can Call Me Al" sounds fresh and lively despite blatant eighties plastic ingredients. This record is now 35 years old—time flies.

Getting close to the closed and delicate sound of the Ortofon Windfeld Ti with other pickups proves to be not so easy. The Lyra Etna also works excellently under the headshell of the tangential tonearm. Not quite as intimate and nuanced as the Ortofon, but with a bit more color and „drama," the Japanese expert pickup knows how to put itself in the scene. With the wonderful two-person hotel room epic „Room 29," it is difficult to decide: Here is the intimacy of the Ortofon, there the openness and liveliness of the Lyra. Thiele's exceptional components, however, are not bothered by all this. They form a perfect basis for such shenanigans and offer an extremely transparent and pleasantly unagitated basis at the very highest level.

Holger Barske

Thiele TT01 / TA01

· Prices: 9.500 / 9.500 Euro
· Distributor: Audio Trade, Mülheim
· Phone: 0208 882660
· Internet: audiotra.de
· Warranty: 2 years
· dimensions (B x H x T): 510 x 200 x 400 mm
· Weight: ca. 18 kg

lp

Thiele
TT01 / TA01

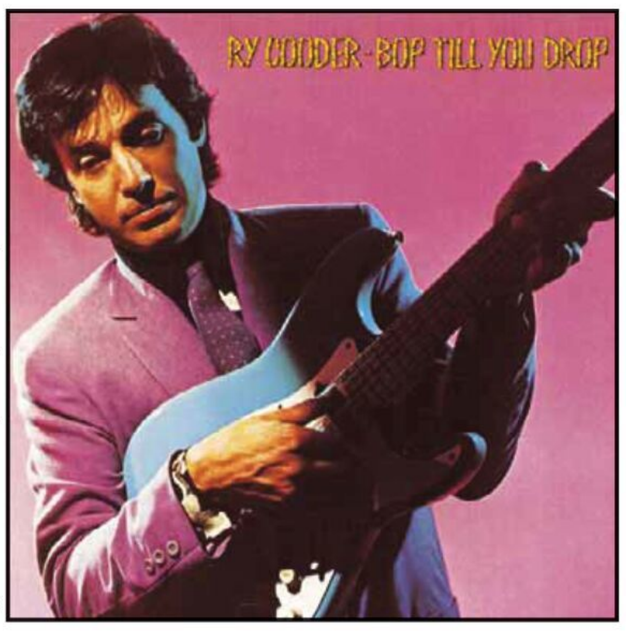
International 1/22

» Helmut Thiele's analog solution plays right at the top. The TT01 and TA01 are strikingly refined, sovereign, and variable. Real analog highlights!

Heavy Mass-Loaded Drive from Acoustic Solid

Acoustic Solid stands for solidity and continuity like no other manufacturer – the massive turntables are simply a force to reckon with. So I am pleased that with the new 311 they offer an attractive overall package with proper weight

coustic
Solid



Ry Cooder – Bop 'til you drop

Music

Ry Cooder
Bop 'til you drop

Dire Straits
Communiqué

Beethoven
Klaviersonaten, Wilhelm Kempff

Ludwig van Beethoven
Die späten Klaviersonaten, Christoph Eschenbach

Peter Tschaikowsky
Klavierkonzert Nr. 1 b-moll, Martha Argerich, Royal Philharmonic Orchestra, Charles Dutoit

Wolfgang Amadeus Mozart
Waisenhausmesse, Claudio Abbado

Oscar Peterson Trio
We get Requests

Jazz at the Pawnshop

While Karl Wirth and his company have mainly drawn attention to themselves with smaller drives in the past few years, it is a much heavier package that we received for our test this time: After all, 18 kilograms of total mass and an 8-kilogram platter speak a clear language. In addition, you get a tonearm and a shelter cartridge, which alone has an MSRP of almost 1000 Euros, for a total price of 2899 Euros!

Yes, that's a lot of money, but in the sum of the individual parts and also given the competition, it's desirable. This price announcement is more or less the logical continuation of the 111 series, which already made heavy turntables available to a large target group at a „board player price."

Of course, the 311 is of a completely different breed, but that doesn't make it less attractive. What do you get for it? Well, a proper inertia drive, which stands stable with a solid base of the exact diameter of the turntable and three lateral outriggers. Traditionally, this Acoustic Solid also features spikes that either couple directly to the ground or are provided with underlay pucks with felt plates – the effect is then somewhat different and recommended for lower-mass furniture. In addition, the drive is decoupled with Teflon washers and silicone dampers. The platter is 40 millimeters thick and, as already mentioned, weighs 8 kilograms, with the usual step from Acoustic Solid at about half the height, which visually slims the bulky part a bit.

It already carries it in the brand name: The 311 is a solid overall package for audiophile demands

In the center of the plate sits the mandrel of the bearing made of hardened stainless steel with a pressed-in ceramic ball as the tip. The brass bearing bushing is recessed in the frame and still protrudes a good bit downward despite the 35-millimeter base plate. The ceramic ball in the steel tip rotates on a disc made of Teflon - this has proven itself in quite a few turntables over the years. The tonearm shaft sits in an attached metal tonearm base with a multi-layered construction, making the change quite easy: You only have to replace the top mounting plate and can mount virtually any tonearm. We also know the tonearm mounted in the set quite well, a descendant of the legendary Rega RB250, which Acoustic Solid has even given a height adjustment using a sleeve clamped in the base.

To round off the high-quality overall package, Acoustic Solid has chosen a real treat in terms of pickups: Although the Shelter 301 II is „only“ the smallest MC system from the pickup specialist Osawa, it has

Since the motor control generates its signals to drive the motor, a relatively simple power supply can be used

Teammates

Cartridges:
- Shelter 301 II
- Phasemation PP-500

Phono Preamplifiers:
- Quad Twentyfour Phono
- Trigon Advance

Loudspeakers:
- Audio Physic Avantera II
- Klang+Ton MiniMonitor TS

Accessories:
- Netzleiste: PS-Audio, Silent Wire
- Phonokabel: Nordost, Signal Projects
- NF-Kabel: Van den Hul
- Unterstellfüße, Racks und Basen: SSC, bFly

Opponents

Turntables:
- Avid Ingenium Plug & Play
- Dr. Feickert Analogue Blackbird

With the additional sleeve in the arm base, even a Rega tonearm is easily height-adjustable

enjoyed great popularity for many years as a relatively good-natured system that also samples records that do not belong to the crème de la crème in terms of sound with an excellent sound. A healthy 0.4mV output voltage and the round needle on an aluminum needle carrier already indicate the superb compatibility, also with phono stages. A real innovation, at least with large turntables, can be found in the drive of the 311: Here, for the first time in a weighty model, drive and motor control have been combined in one housing. This has resulted in a larger diameter, which suits the model well. The control panel itself is already familiar from older models: There are buttons for selecting the speeds 33 and 45, as well as for fine-tuning the speed, which the synchronous motor takes over in real-time.

The driving force is transmitted to the platter via the motor pulley and two silicone nylon belts. Here you can play with the set-up for a while until the two belts are neither too tight nor too loose and run smoothly.

A brand new feature is the large motor can with an integrated control unit, which is correspondingly bulky

The ramp-up time to the target speed is okay considering the heavy platter - not like a direct drive, but fast enough. The manufacturer specifies the synchronization with 0.08%.

And the 311 is piano-proof: Both the Beethoven piano sonatas and the „old warhorse," the first Tchaikovsky piano concerto, come across as incredibly stable and with a lot of authority. Analogous to the statement that a good pianist needs the strength in his fingers not for the thunderous passages, but for the precise control of the very subtle notes, one can also say about the new Acoustic Solid that with its sheer mass it perfectly brings out especially the subtle intermediate notes in pianissimo passages against an extremely quiet background. Here, the record itself is the limiting factor: there is no ambient noise coming from the turntable itself. And what was said above about the pickup also plays into the 311's hand: The Shelter 301

The control electronics and the synchronous motor are located closely together in the new motor box

The feet, also constructed in several parts, have an impeccable manufacturing quality

II does not take minor scratches and impurities amiss and nonchalantly goes over the one or other mechanical disturbance. By the way, the same applies to problematic mastered records. For example, my copy of „Bop til you drop“ by Ry Cooder, on which the guitar cuts quite nastily into the treble region from time to time – the Shelter still implements this with the necessary aggressiveness, but not in such a way that you immediately fall victim to a flight reflex or need to turn down the volume.

If necessary, a drive with 18 kilograms can also bring out the hammer and its genuinely excellent dynamic capabilities. Pop and rock listeners may not like to hear this, but classical records have a much wider dynamic range in most cases, if only because compression is NOT used as a stylistic device here, as has been the case with popular music for a long time. And so I spent a lot of time with the 311 and my classical records, not because the Acoustic Solid does not like pop music, but because it plays so wonderfully dynamic and at the same time transparent and precise. With the Phasemation PP-500, with its much sharper needle grind, mounted for testing, fine resolution and depth gradation disciplines became even slightly better, but not so much that one would want to do without the charm of the Shelter. The package that Karl Wirth has put together is very well-thought-out and recommendable!

Thomas Schmidt

With the precisely turned pulley and two silicone-nylon belts, the driving force is transmitted to the platter

Acoustic Solid 311

· Price: 2,899 Euro complete with cartridge
· Distributor: Acoustic Solid, Altdorf
· Phone: 07127 32718
· Email: info@acoustic-solid.de
· Internet: acoustic-solid.de
· Warranty: 2 years
· Dimensions (BxHxT): 310 x 190 x 310 mm
· Weight: ca. 18 kg

lp

Acoustic Solid 311

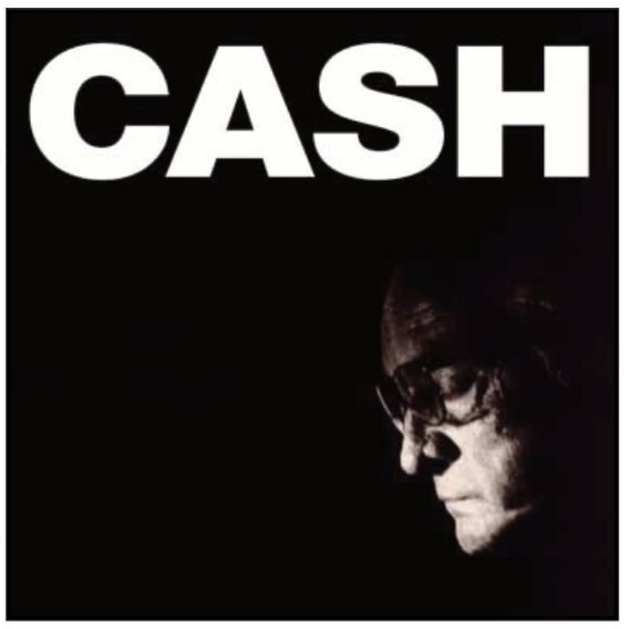
International 1/22

» With the Acoustic Solid 311, you get a sovereign turntable paired with a clever tonearm/system combination at an extremely attractive price.

Steamy Single Ended Power

There's no end to the surprises - Thivan Labs, the Vietnamese specialist for tube electronics and high-efficiency loudspeakers, surprises with one interesting device after another. Today: When you need a little bit more

THIVAN
TRANSFORMER
WWW.THIVANLABS.COM



Johnny Cash – American Recordings IV

Music

Johnny Cash
American Recordings IV

Nina Simone
Live At The Village Gate

Anouar Brahem
Barzakh

John Coltrane
A Love Supreme

Traditionally, this would be the place for my usual whining about the excessive weight of the „iron pigs“ from Vietnam. I‘ll spare myself that today and instead be pleased that Mr. Thi has fallen for the excellent idea of realizing his 211 power amplifiers in a mono design. As a result, one channel weighs only a completely undramatic 36 kilograms. In a way, it‘s a vacation for my battered back. Even if the impressive power amplifier bolides with the brightly shining large transmitter tube are no longer quite such a spectacular special offer as the „811 Anniversary“ integrated amplifier. Yet it is remarkable how moderate the pricing is: A pair of these monos costs 6900 EUR. Not bad for 72 kilograms of finest direct-heated single-ended greatness.

Like all amplifiers from this manufacturer, this concept is also based on very classic circuit principles. One relies on a structurally simple topology, amply dimensioned „iron,“ and a generally quite uncompromising component selection. The reward for the effort is about 45 impressive single-ended watts. You can also drive somewhat more „normal“ speakers than the designated high-efficiency speakers, which should typically be plugged into single-ended tube amplifiers.

Let‘s put the cart before the horse and take a look at the most visually striking component of the ensemble: the 211 power tube. This is one of the most commonly used transmitter tubes from the early days of broadcasting. With an anode power dissipation of 75 watts, it can generate considerable high-frequency power, depending on the mode of operation. The glass bulb, which is about 20 centimeters high and six centimeters in diameter, glows quite brightly, almost white, when in operation, which immediately tells the connoisseur that the heater works utilizing a thoriated

tungsten cathode. This is the only way to realize such a spectacular light show. If you want to produce the potential power with the 211, you have to operate it at least partly in the so-called „A2“ range. This means that the control grid wants to be loaded with appreciable amounts of grid current, for which it needs a powerful driver arrangement. At Thivan Labs, they like to entrust this job to a type 6V6 tetrode.

Although this leaves the realm of pure triode design, it uses a powerful tube that is ideally suited for the job. A proven double triode does the voltage amplification on the input side with an octal socket, which also comes from the American region: a 6SN7. That‘s it. Three tubes per channel, that‘s all it takes. This is the optimal prerequisite for pure, unadulterated tube sound. All used tube types are available in all possible quality classes without any problems. Thivan Labs has once again shown a good hand for excellent equipment: The 211 is from current Chinese Psvane production, the other two are old originals. You can get along with that very well, but there‘s still room for improvement for „Tube Rollers.“ Four full-sized inductors in the Thivan-typical gray shrink varnish outfit determine the picture on the cover plate of the amplifier housing. The „wood“ is only a foil but is visually quite convincing.

The output transformer resides at the rear right; this is one of the two transformer heavyweights of the device. There are two power transformers; one is responsible for generating the high voltage, and the other for the considerable heating power required. The last gray block in the bunch is a filter choke for the high voltage supply. The ensemble is supported by four rather impressive oil paper capacitors mounted with access to fresh air. Once again, this is all very confidence-inspiringly richly di-

Teammates

Turntables:
· TechDAS Air Force III / Reed 3p

Cartridges:
· DS Audio DS-E1

Phonovorstufen:
· DS Audio

Preamplifiers:
· NEM PRA-5
· MalValve preamp three line
· Grandinote Genesi

Loudspeakers:
· DIY Mini Onken / Focal / JBL
· Cube Audio Nenuphar Mini
· Klang + Ton Ella

Competitors

Power Amplifier:
· Silvercore Colector‘s Edition

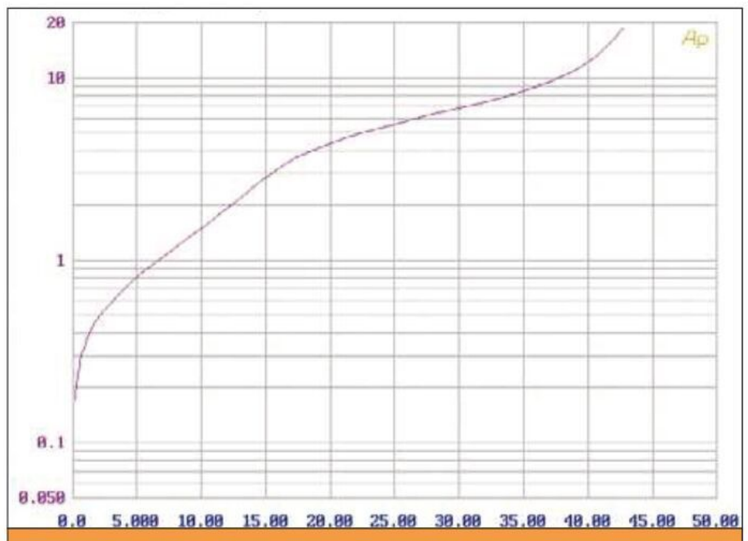
There are no major features on the back

The tube assembly: 211, 6V6, 6SN7

mensioned, an impression that continues seamlessly after the bottom plate is detached. The once again exceptionally well-thought-out and meticulously executed construction only needs circuit boards for the obligatory filter capacitors; everything else is freely wired. The component quality is excellent across the board; we are pleased to note that the input signal is routed via a transformer. There's an RCA and an XLR socket on the connection side, but the latter is wired unbalanced. You can choose between the two via a toggle switch on the back. A second one is responsible for the input sensitivity and switches a voltage divider into the signal path if necessary. Which configuration is the right one for you depends on the gain of your preamplifier and the sensitivity of your speakers.

The monos only have a single speaker connection for all impedances, and the available power is identical for all loads within certain limits. Otherwise, there is not much to operate except the confidence-inspiring power switch. As the owner of these

Large oil paper capacitors sift the high voltage

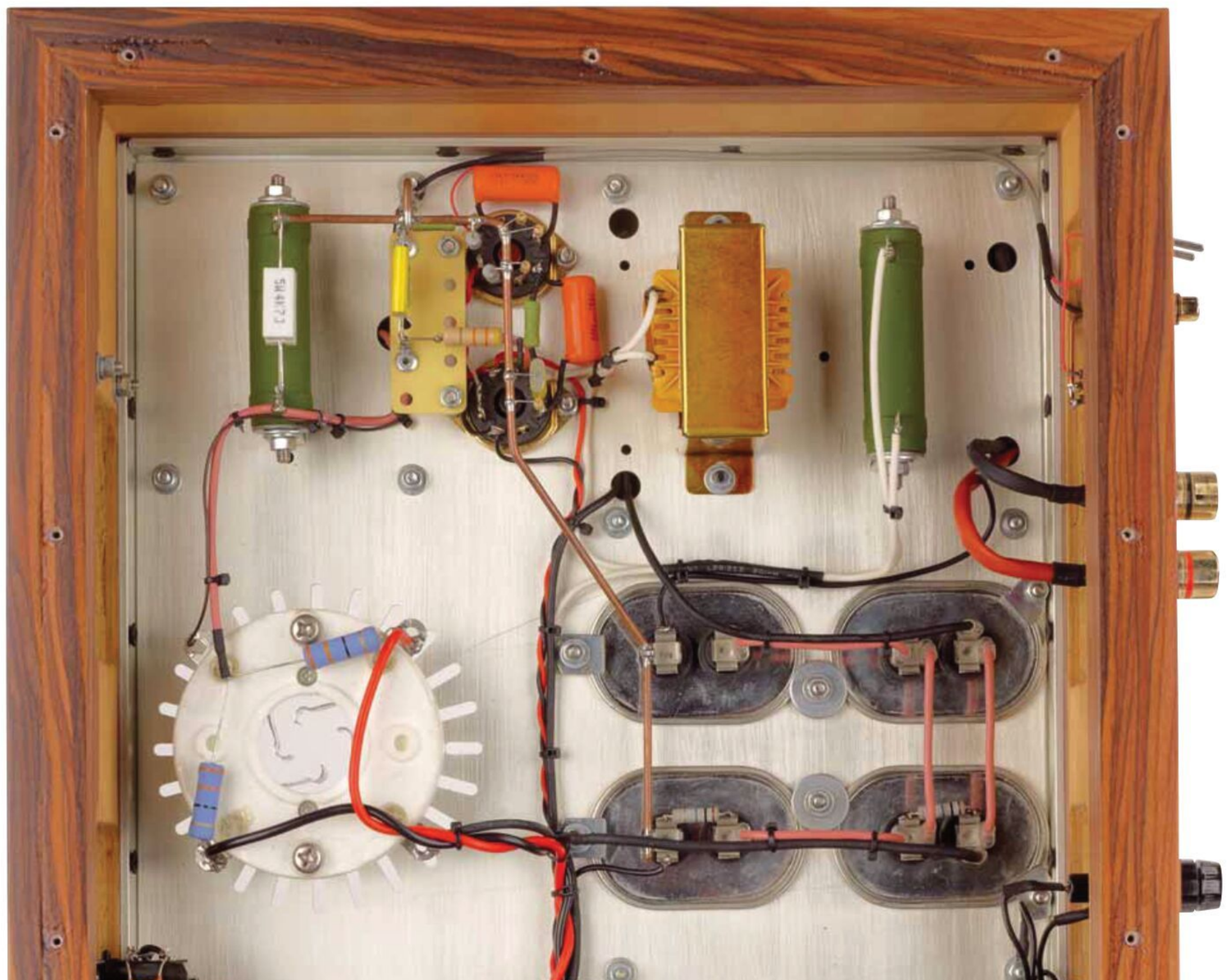


Measurements

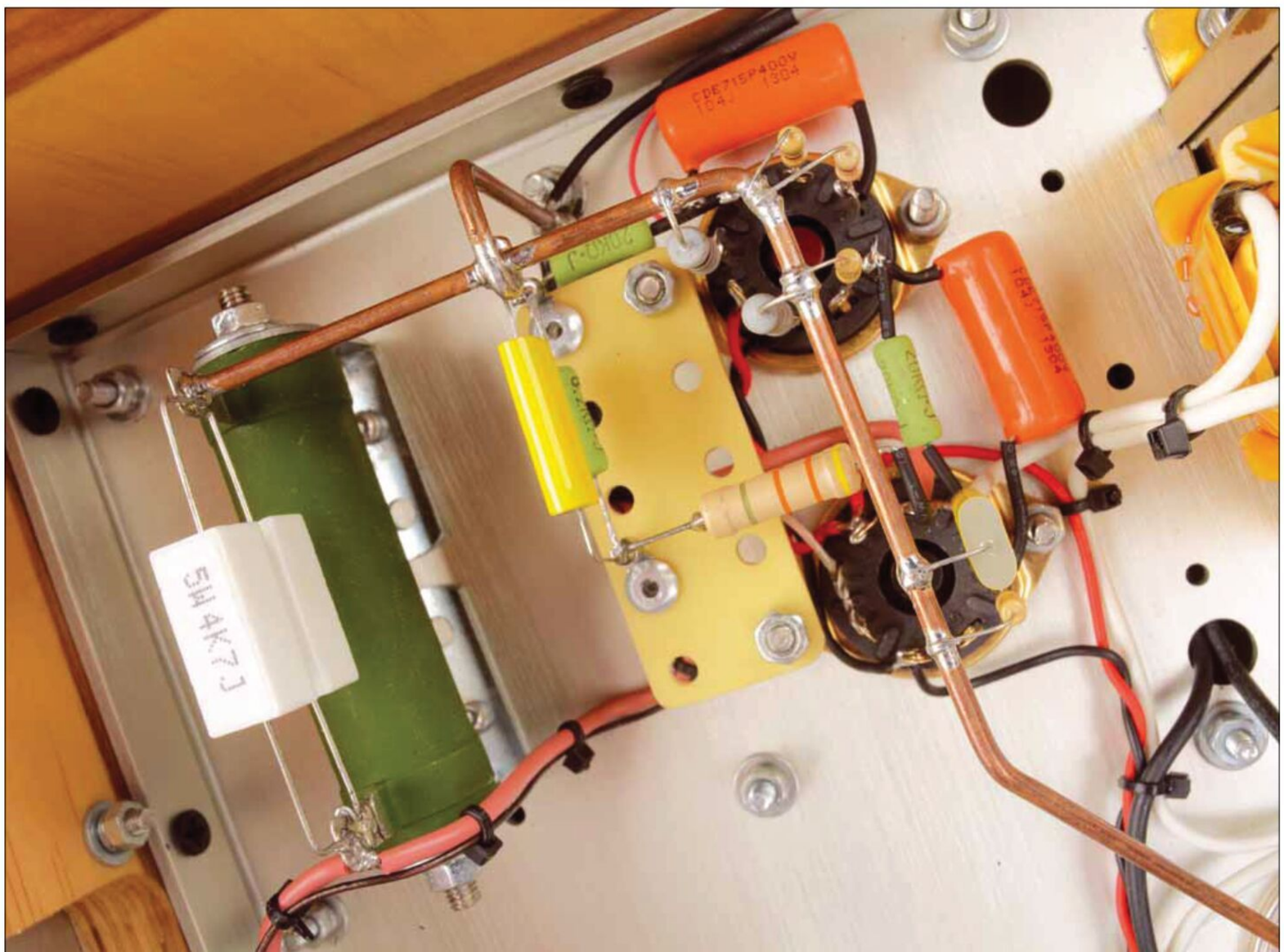
Measurement Comment

The distortion measurement over the output power at eight ohms shows exactly the behavior one would expect from such an amplifier: distortion that increases linearly with the output level. If one were to define the usual 0.7 percent as the upper limit, the device would produce just five watts, but if we abandon such ideas, it's more than 40. Otherwise, the Thivans are without fault: They deliver a full 78 decibels (A) SNR at five watts into eight ohms; a channel separation cannot be measured due to the design. The power consumption is a constantly high 231 VA per channel - that's the price of consistent Class A operation.

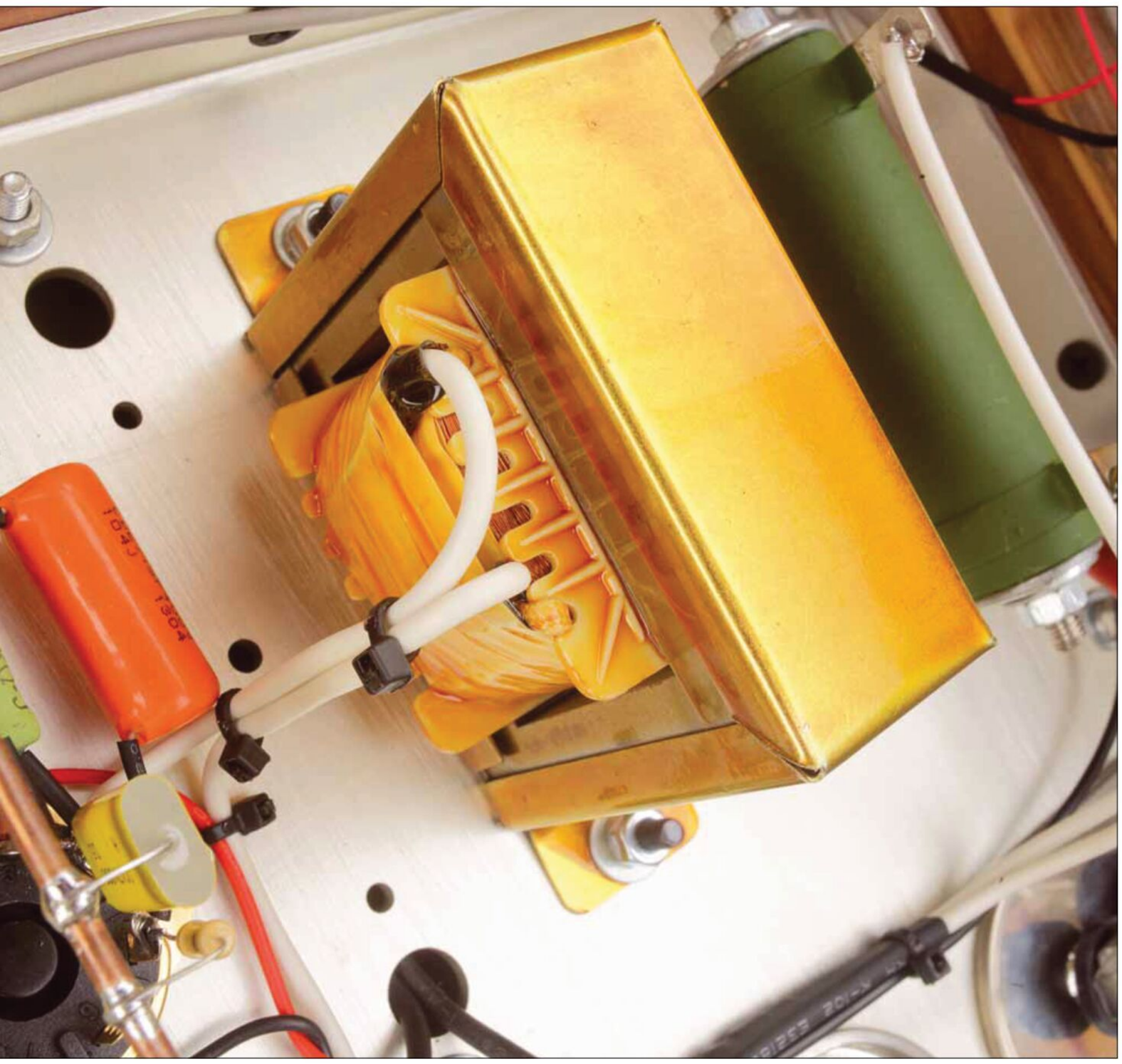
splendid constructions, there is nothing to do with quiescent current setting or similar mischief; the end tube is fixed in this respect. The amplifier shows the distortion behavior expected from such a concept: The distortion increases steadily with the output level. If you exceed the 40-watt mark, it can even get into double digits. This circumstance is typical for class-A



Thanks to the mono design, there is no excessive crowding inside the unit



This is how picture-perfect free wiring works



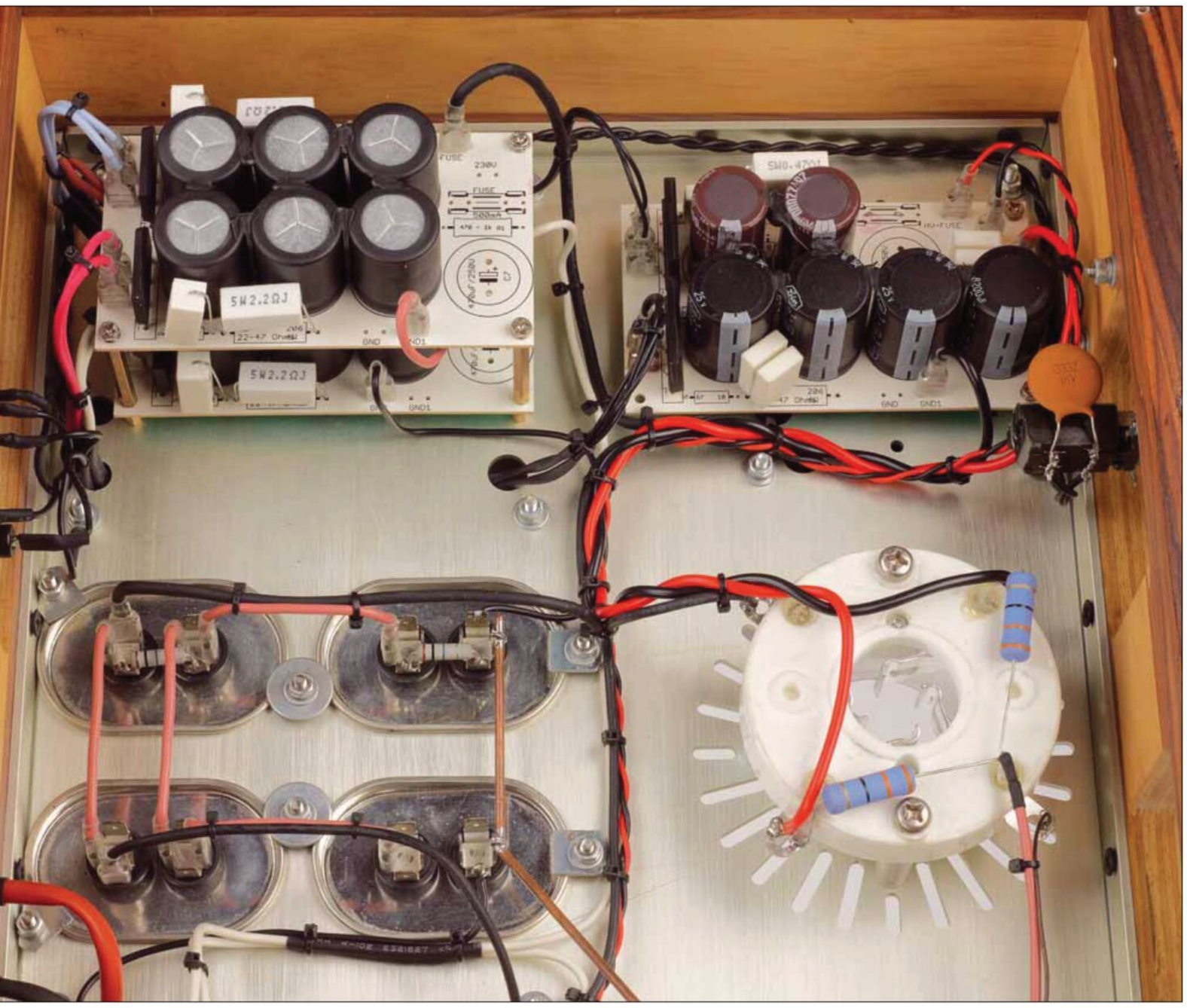
This transformer decouples the input signal

amplifiers in grid current mode and does not scare me at all anymore. On the contrary: This behavior may be responsible for the excellent sound of such concepts.

Despite transformer-coupled inputs, the Thivan monos are the only amplifiers I have not yet been able to persuade to operate completely hum-free with my NEM preamp. However, on MalValve's preamp three line, there were no problems in this respect, nor on the Gradinote Genesi. As far as selecting the most suitable loudspeaker is concerned, I also experienced a small surprise: The combination with the Cube Audio Nenuphar Mini full-range loudspeakers, which I praised elsewhere in this issue, was a rarely experienced jackpot. The full, colorful character of the monos matched the slightly rising tonality of the Cubes like a glove. All in all, the result was a real firework.

In the bass, the full-range drivers shifted air volumes that I couldn't manage with any other combination. The vocal range was dripping with fervor and expression. This was so good that I even managed to listen to the complete „American Recordings IV" by Johnny Cash again, which I had no longer thought possible thanks to overdosing. Anouar Brahem's Oud sounded uniquely intense yet intimate. Nina Simone sang as if she was doing it just for me. I will remember this superb music reproduction made possible by these truly fantastic amplifiers for a long time.

Holger Barske



The stable supply relies on ample screening capacity

Thivan Labs 211 Power Monoblock

· Price (pair): ca. 6,900 Euro
· Distributor: TCG GmbH, Nordhorn
· Phone: 05921 7884927
· Internet: thivanlabs.de
· Warranty: 2 years
· Dimensions (BxHxT): 450 x 290 x 380mm
· Weight: ca. 36 kg per Channel

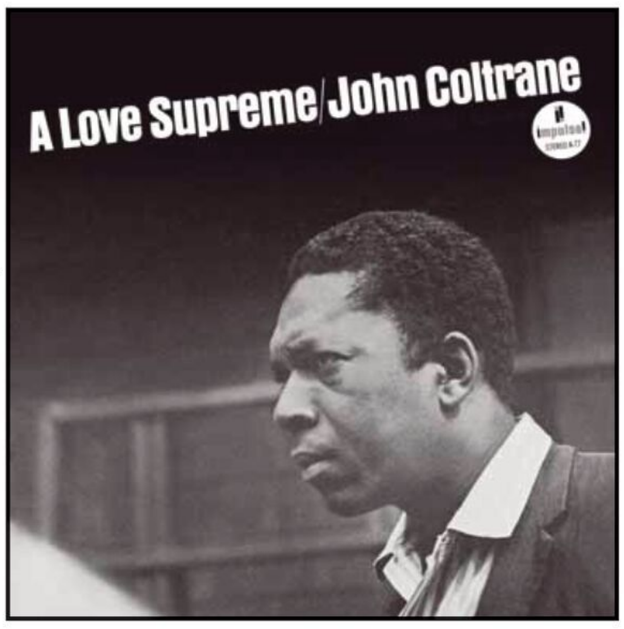
Thivan Labs 211 Power Monoblock

International 1/22

» Nothing sounds like a big single-ended tube amp. If proof were needed, Thivan's 211 monos would kick it in powerfully and passionately.

The Birthday Phono

Hard to believe, but Cologne-based sound engineer Norbert Lehmann has been doing this for over 30 years now. With some delay – the company has existed since 1988 – there's now the anniversary edition of a Lehmann phono preamp classic



John Coltrane – A Love Supreme

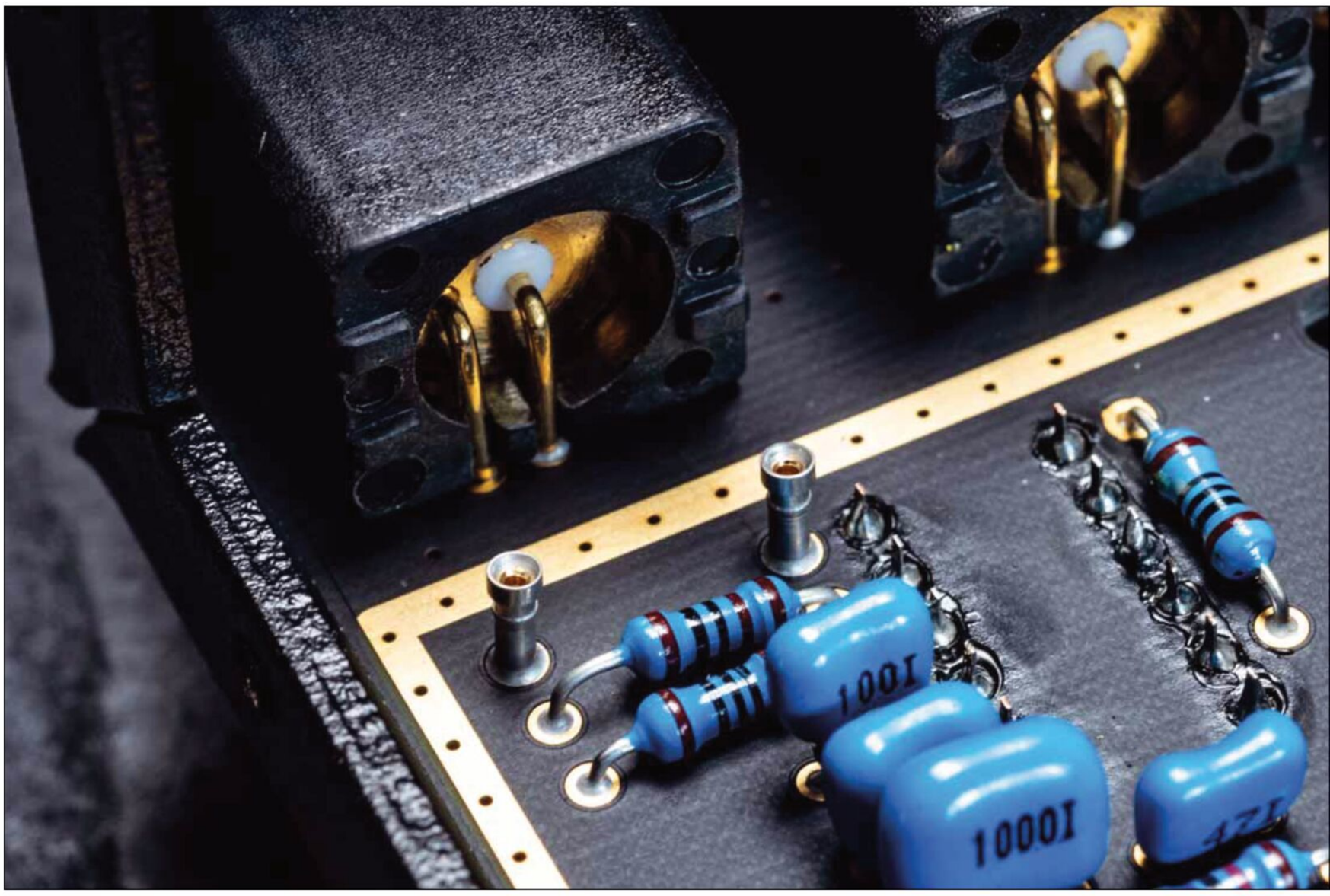
Music

John Coltrane
A Love Supreme

Ricki Lee Jones
S/T

Ricki Lee Jones
Pirates

Kungensmän
Stockholm Marathon



The two contacts on the board accept the desired terminating resistor for the MC input

Of course, if we want, we can start from the other side. The „Decade“ phono preamplifier has been around since 2005, so the „Jubilee“ model could also be seen as a reference to last year‘s fifteenth anniversary. In addition, the 3400 EUR gem offers the opportunity to look at Norbert Lehmann‘s basic approach to equalizer preamplifiers, which, despite all the fashionable trends in the realization of such devices, has been based on the same circuit principle since the early days of the company. The first device was called „Entec Black Cube,“ back in the days when Lehmann was still working full-time for Westdeutscher Rundfunk. „Black Cubes“ still exist today, and the circuit design has served as a blueprint for countless devices since then.

The smaller Black Cubes still contain the technology in an unspectacular square metal cube that can be hidden behind the system and is powered by a power supply unit. The larger models, such as our review sample, consist of two „ proper“ devices, which are too beautiful to be hidden away. In the case of the Decade and its current Jubilee

Efficient decoupling: The Lehmann stands on the new "net feet" supplied as standard

edition, these are two compact (eleven by five centimeters front panel dimensions) and deep components connected with a cable that can be plugged in on both sides. You rightly assume that one of the two devices handles the signal processing; the other is responsible for the power supply.

One of the innovations of the Jubilee and a reason for the late release of the device can be found in triplicate under both components: Yep, the cabinet feet. They are an offshoot of the well-known absorbers by Audio Physic developer Manfred Diestertich. The predecessors of these device feet worked with taut threads as elastic elements; in the new generation, it's a fabric disk that takes over a large part of the decoupling. It is supported by two layers of heavy plastic foil and a cork ring. These are precisely the things that make up the long-term evolution of Lehmann's phono preamplifiers, and that help them achieve a remarkable degree of sonic perfection.

In terms of features, the Decade Jubilee is rather pragmatic. Of course, it can amplify MM and MC signals. Both system types are connected via the same pair of RCA input jacks solidly screwed to the housing. Which signals it should amplify is determined by the position of two toggle switches on the front. One selects MM or MC operation, and one allows the gain to be increased by an additional 10 decibels. Thus, 35 and 45 decibels are available for MMs, and 56 and 66 for MCs. This fits in virtually all cases. Toggle switch number three activates the high-pass filter, which takes effect relatively early: six decibels of reduction are already available at 50 hertz. That's why the manufacturer calls this option a bass filter and not a rumble filter, as the effect is clearly audible.

Teammates

Turntables:
- TechDAS Air Force III / Reed 1X
- Clearaudio Master Innovation / TT2
- Sony P-2250

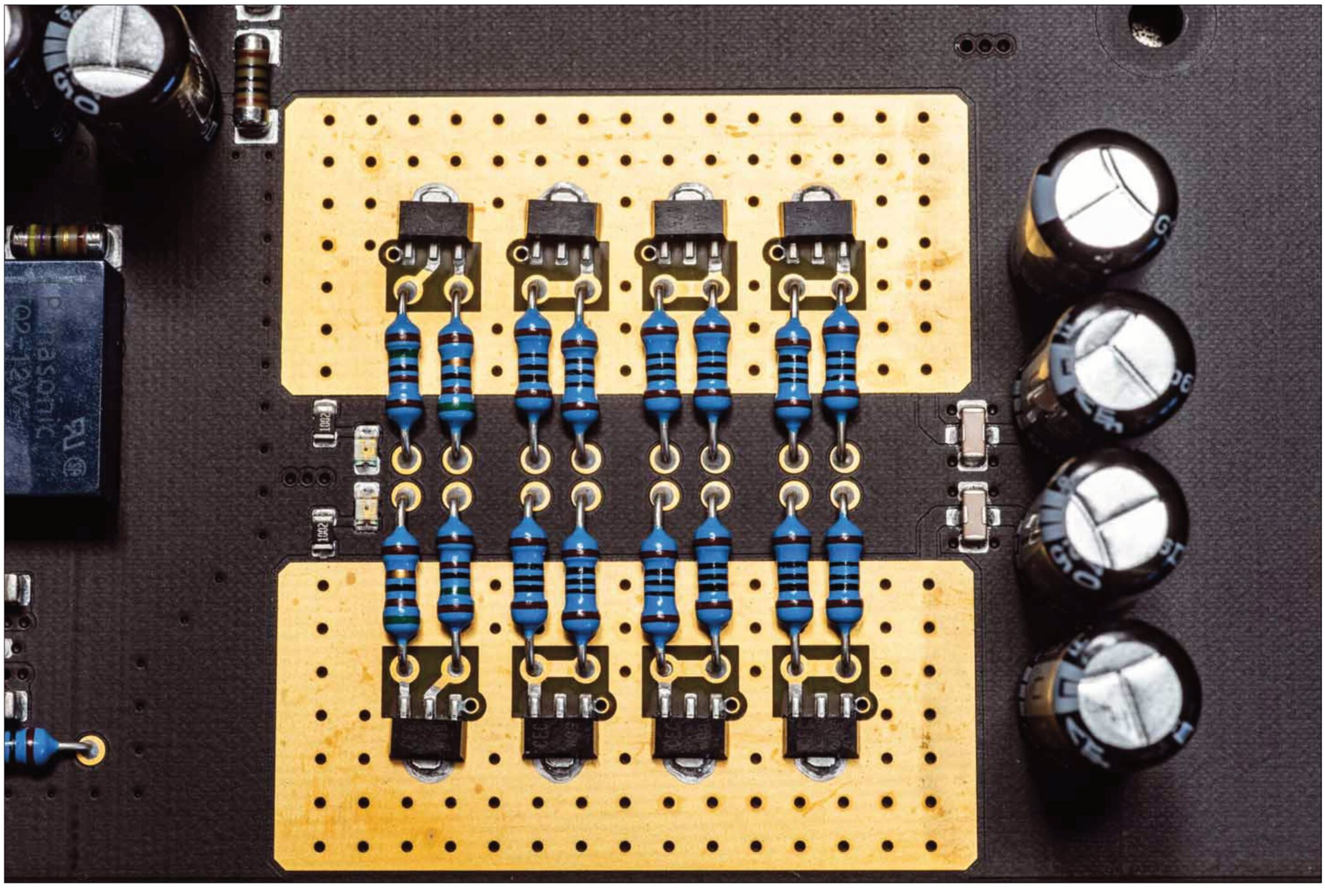
Cartridges:
- Ortofon Windfeld Ti
- Lyra Etna
- Audio Technica AT5V

Loudspeakers:
- DIY Mini Onken / Focal / JBL
- Cube Audio Nenuphar Mini

Competitors

- Malvalve preamp three phono
- Fidelice 7566

Lehmann specialty: The Diamond Buffer at the output of the equalizer, now in SMD design



Four-pin XLR cable: This special connection couples the power supply to the equalizer

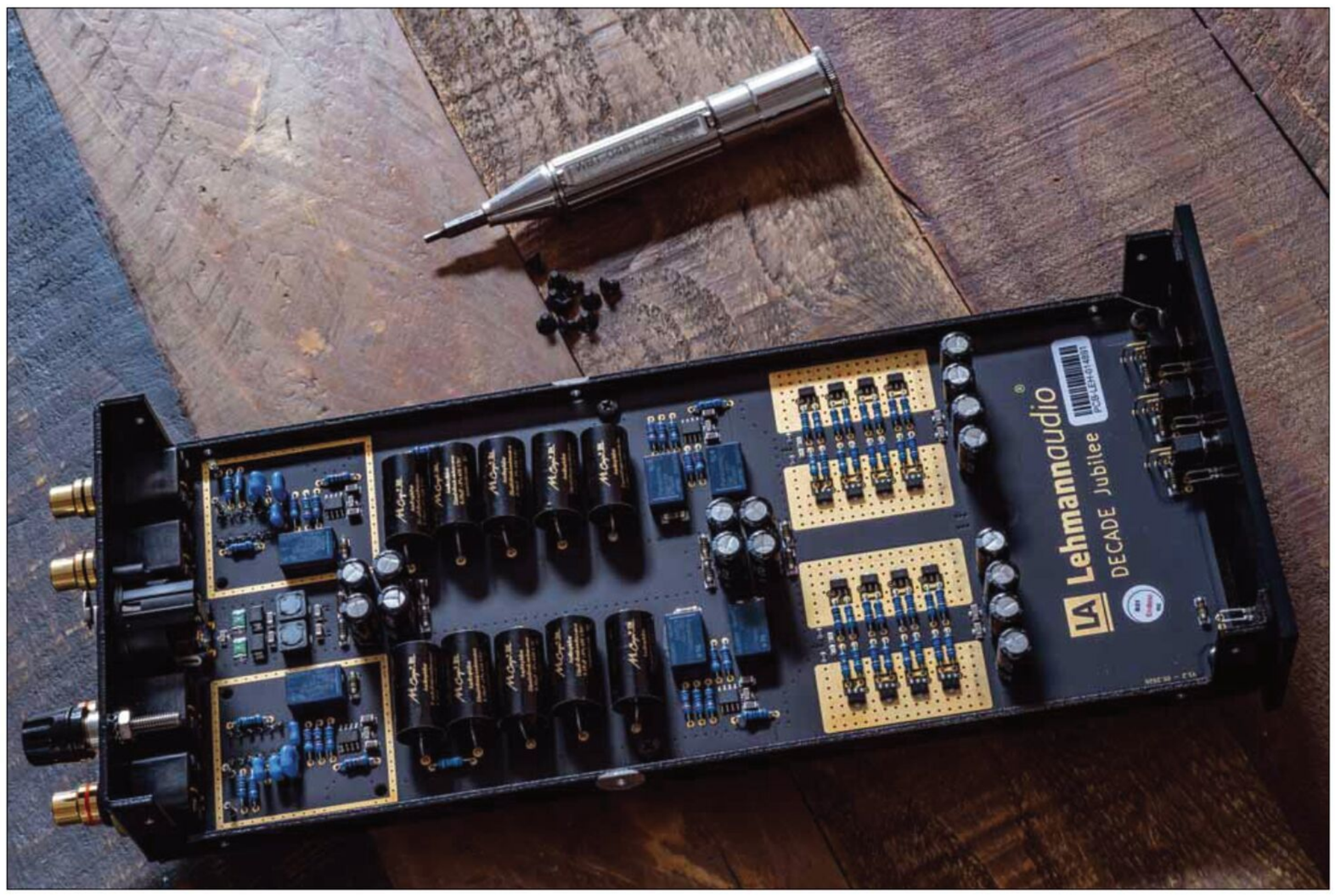
Measurements

Measurement comment

The frequency response measurement of the Decade Jubilee reveals the effective bass filter, which indeed has an apparent effect already at 50 Hertz. This is a fine thing for corrugated records and with small speakers. The device behaves exemplarily in terms of measurement. In MM mode, the distortion at 5 millivolts at the input is just 0.008 percent, the impedance ratio a whopping 79 decibels(A), and the channel separation is in the same range. At full gain and with 0.5 millivolts, the result is 0.08 percent distortion, 64 decibels(A) of external voltage spacing, and channel separation that is also at least as high. The power consumption is just under eight VA from the mains.

There are only a few options for pickup termination, which has a long tradition at Lehmann. Via the „mouse keyboard“ on the bottom of the device, 47,000 ohms can be set for MMs and 100 ohms or 1,000 ohms for MCs. If you have an MC with a little more special taste, you can plug desired resistors on sockets inside the device. This is not super comfortable but has the undeniable advantage of very short signal paths.

On the back of the amplifier compartment, there‘s the obligatory pair of output jacks and a solid binding post for the ground connection. Under the lid of the device,

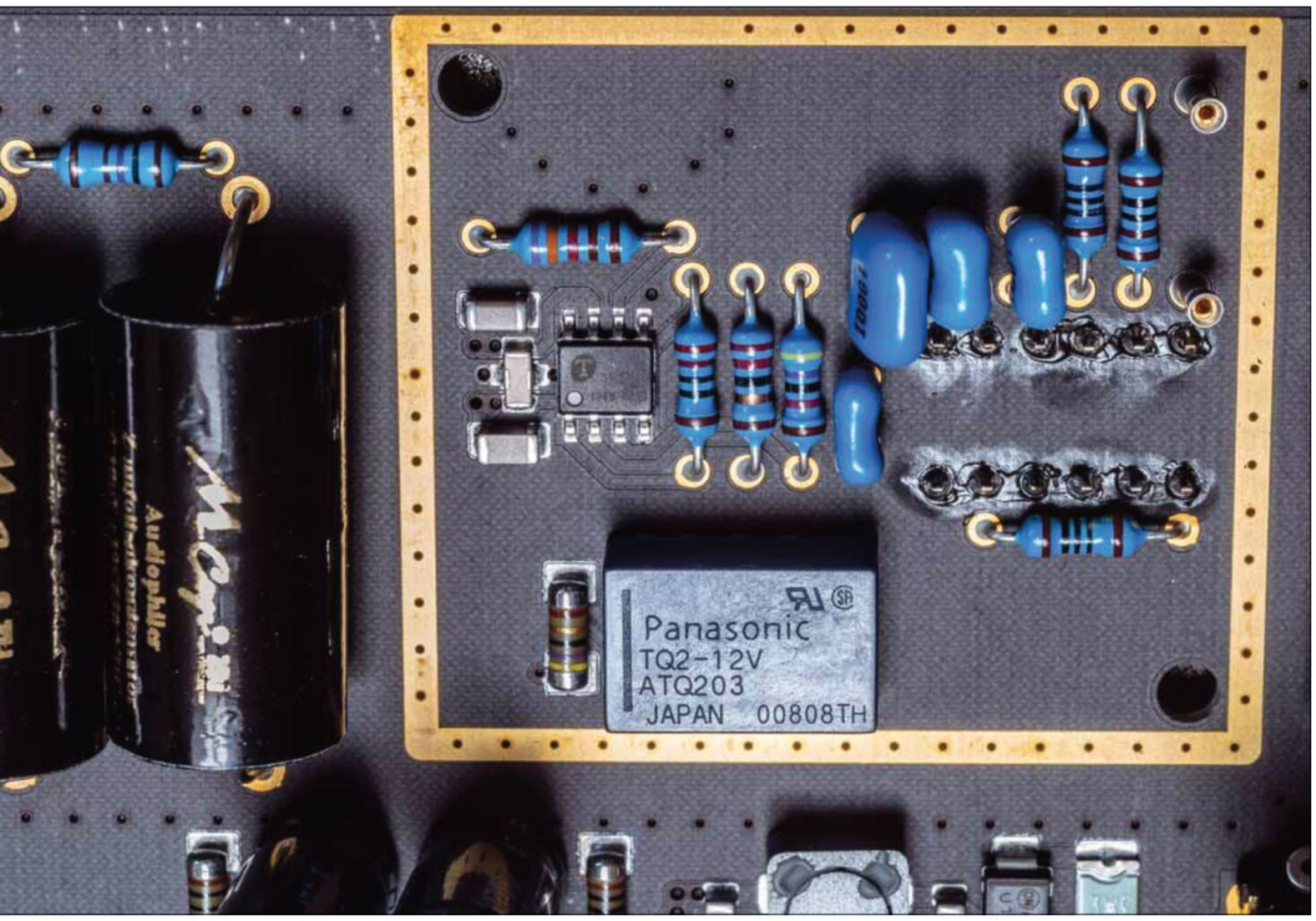


The body of the Decade Jubilee is almost too good to be hidden under a lid

The small back panels of the device are entirely occupied with connectors

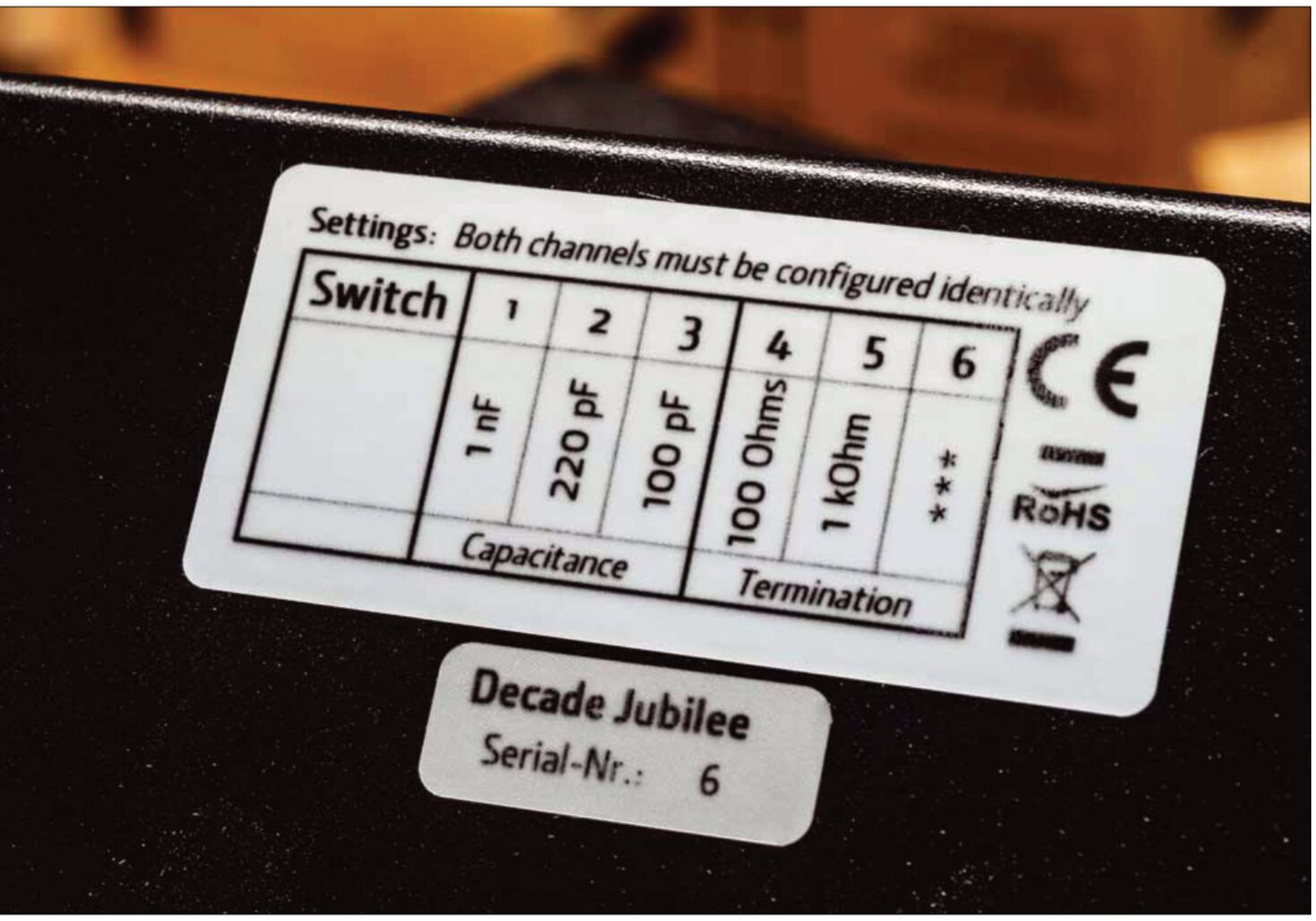
which is exclusively available in black, an aesthetically very appealing and, compared to our first encounter with the Decade in LP 6/2008, changed construction comes to light. The matte black PCB with gold-plated tracks has a much stricter channel separation than before, and the layout is entirely new. However, the basic circuit topology is the same as before: The input amplification is handled by a special chip from ThatCorp, which still has a say in the race for the world record for noise amplification. This is followed by the passive equalizer network, behind it a second, somewhat more „normal“ operational amplifier, and last but not least, a so-called „Diamond Buffer.“ This is built with eight SMD transistors (somewhat more potent than the original model) and delivers an excellent low impedance signal to the output jacks. For the top model Silver Cube, Lehmann borrowed the exceptional Mundorf tin-foil capacitors, which are exceptionally good sound-wise in the equalization. Operating mode, gain, and bass filter switch relays directly on the spot. That‘s how the pros do it – no objections.

The power supply with toroidal transformer, ample filtering, and voltage regulation



The input amplification with t he legendary ThatCorp chip

There are fewer changes to report for the power supply, except for the double MU metal shielding of the toroidal transformer; essentially, everything remained the same. The voltage regulators reside in the power supply, and filtering is done with plenty of filter capacitances and chokes on both the input and output sides. The power switch is still not very conveniently located at the back, but the device doesn‘t mind being permanently switched on. Interestingly, the power consumption of around eight VA is noticeably lower than what we measured at the time. Norbert Lehmann is an avowed opponent of sonic coloration in playback devices - no wonder, given his studio engineering background. And you can hear that in his devices, including the Decade Jubilee.



Setting instructions? There's a sticker on the bottom of the device

This machine well serves anyone who wants to distill a cartridge’s tonal essence. The Cologne team forms a fortunate combination with the Ortofon Windfeld Ti. With this combination, even after weeks of continuous operation, I cannot for the life of me discern any preferences for certain areas of the spectrum. However, very much those for a lively and powerful way of playing. This is especially noticeable with extreme recordings like John Coltrane‘s „A Love Supreme.“ Lehmann and Ortofon always keep the balance on this difficult-to-reproduce early stereo recording. Coltrane‘s sax sounds feverishly hot, has power and expression, but it is not annoying. On the other hand, the illustrious accompaniment team sounds wonderfully nuanced and discreet – amazing how well the combination can place both extremes simultaneously in the room. Even its imaging succeeds very convincingly, which is quite a feat with the extreme ping-pong recording.

The indestructible Rickie Lee Jones also proves to be perfectly „compatible“ with the qualities of the components. On „Coolsville,“ the early Miss Jones balances vocally exemplary fine on the knife-edge, her piano work on „Pirates“ has pressure and attack. This is an analog pleasure at the highest level, but if you ask me how the Jubiläums-Lehmann sounds, I must leave you with the answer: It doesn‘t sound; it passes music. What more could you possibly ask for?

Holger Barske

Lehmann Decade Jubilee

· Price: ca. 3,400 Euro
· Distributor: Lehmann Audio, Köln
· Phone: 0221 29493320
· Internet: lehmannaudio.com
· Warranty: 2 years
· Dimensions (B x H x T): 110 x 50 x280 mm each
· Weight: ca. 0.87 / 1.56 kg

lp

Lehmann
Decade
Jubilee

International 1/22

» Lehmann's Decade Jubilee is a near-perfect phono preamp. Tonally without a signature, with impressive dynamic capabilities and maximum transparency.

Air Bearing Dream Record Player

The turntables from the small Danish manufacturer Bergmann are no longer completely unknown. The latest turntable/ tonearm combination made by this manufacturer should certainly further boost its presence on the market

bergmann

Bohren & Der Club Of Gore – Patchouli Blue

Music

Bohren & Der Club Of Gore
Patchouli Blue

LA4
Just Friends

Livingston Taylor
Good Friends

Counting Crows
August And Everything After (45 rpm)

Fortunately, Johnnie Bergmann has completed his new entry-level models Modi and Thor. The great thing is that he has retained the no-frills, simple look characteristic of all his creations. At least as crucial, however, is the adherence to the technical merits that have made him famous: The platter rests on an air bearing, and so does the tangentially guided tonearm. The new Bergmann package is still not a real bargain, but for just under EUR 11,000, there should be nothing technically comparable on the market - and not visually anyway. In terms of tonearms, you could look at the impressive designs of the Polish manufacturer Pre Audio, but there's no turntable there that's comparable to the Modi in any way.

Being a Danish manufacturer, Bergmann was again allowed to choose somewhat original model names from Norse mythology for the two new components - something he's been doing consistently since the company's founding in 2008. And I would almost bet that we will see a cartridge called „Mjölnir" at some point. The turntable and tonearm can also be purchased separately, but the package is more fun for financial reasons.

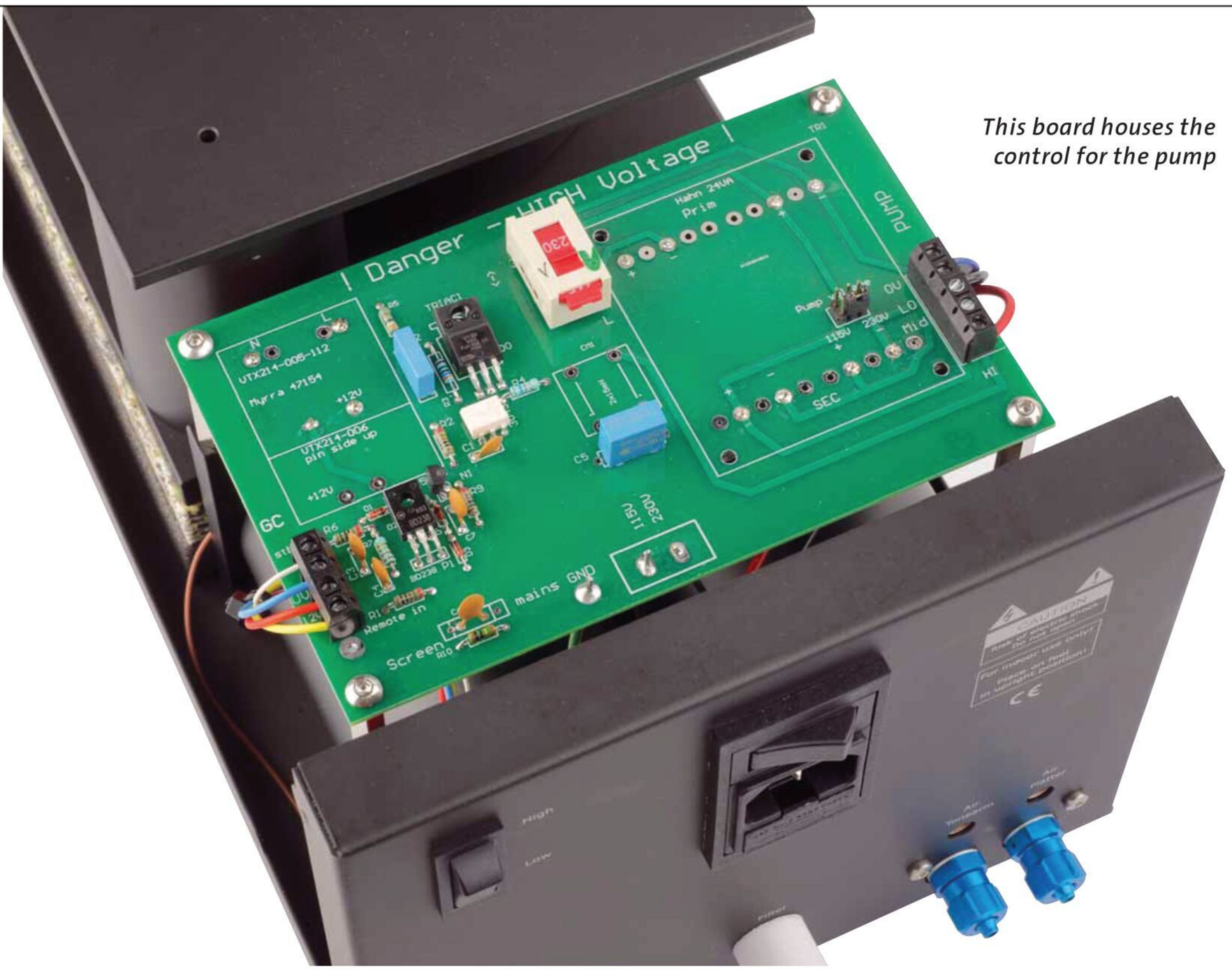
And since we are dealing with two components floating on air cushions, the compressed air has to come from somewhere. A rather bulky supply unit is responsible for this, connected to the „business end" via two pleasantly long hoses and a control cable. It can therefore be placed somewhere out of sight. Usually, there's nothing to operate, but the manufacturer recommends using the power switch on the back during more extended absences. Everything runs wonderfully quietly and inconspicuously as we are already used to from Bergmann air supplies. If you absolutely want to, you can hear a minimal draft from the row of holes at the top of the tonearm's bearing tube, but that's marginal.

The setup of the very professionally packaged and largely pre-assembled device proves to be unproblematic. If possible, you need a well-decoupled surface from impact sound, which should also be horizontal. However, the Modi has height-adjustable feet so that you can readjust the alignment here.

As an air bearing user (TechDAS), I am not entirely unfamiliar with the basic design of the Bergmann platter bearing. However, I am amazed at how far Johnnie Bergmann has pushed the simplification of the technology, which works flawlessly. The lower bearing surface is simply an annular milled-out section of the drive base made of an undefined composite material. Near the fixed platter axis - that's right, the bearing is of inverted design - air flows in, lifting the platter and forming a thin film between the surface of the ring and the underside of the platter. The bottom of the aluminum platter, which weighs a mighty 7.5 kilograms, is a simple flat surface. It is undoubtedly nicely straight and blasted before anodizing like the upper side, but

The connection field of the Modi: on for the control, one for the air, one for the ground

Clear lines, no-frills: the Bergmann is a feast for the eyes



This board houses the control for the pump

Teammates

Cartridges:
- Skyanalog P-1
- Lyra Etna
- Audio Technica AT5V

Phono preamplifiers:
- MalValve preamp three phono
- Clearaudio Balanced V2

Preamplifiers:
- NEM PRA5

Power amplifiers:
- Silvercore Collector's Amp

Loudspeaker:
- DIY Focal / JBL

Competitors

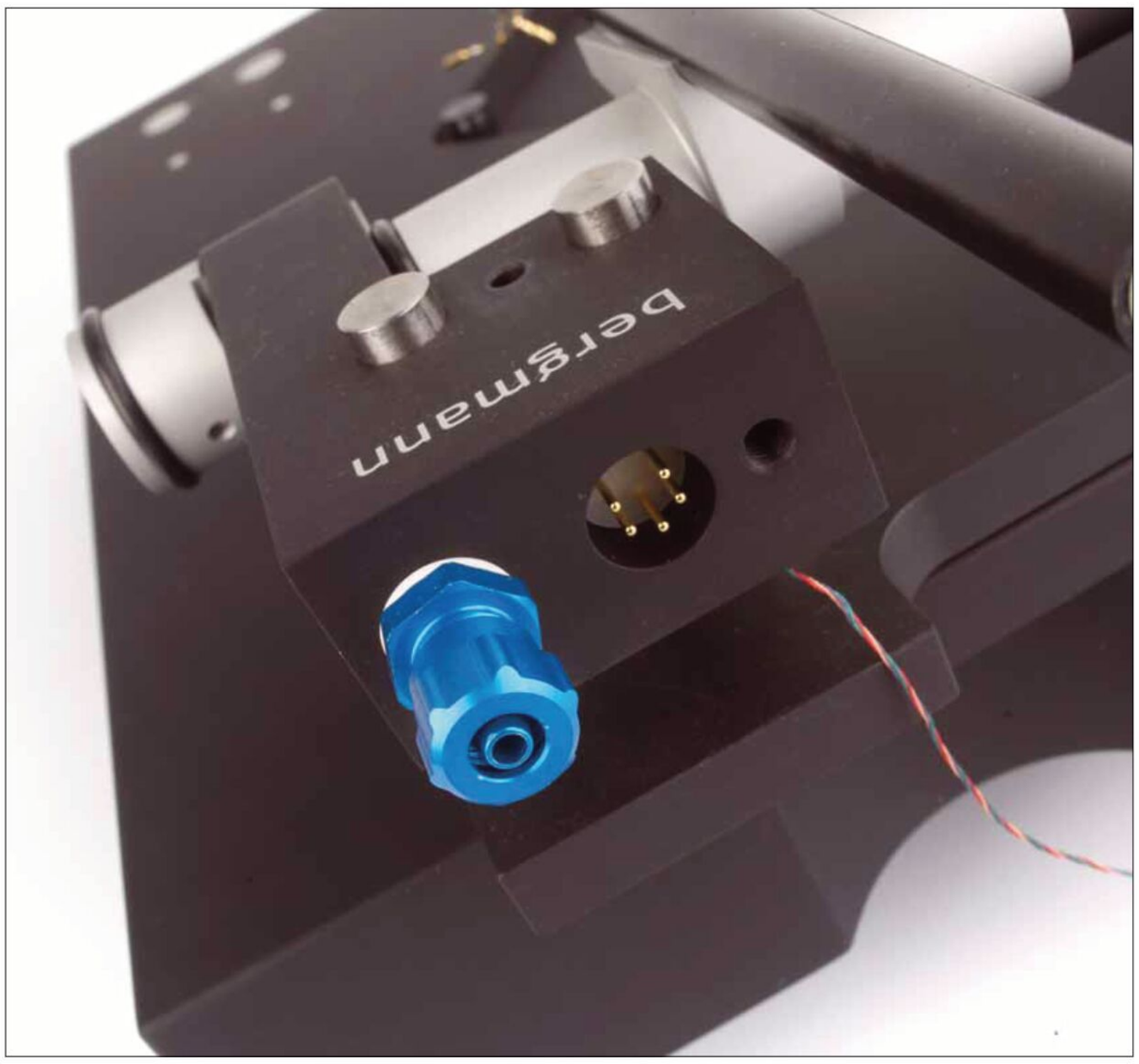
Turntables:
- TechDAS Air Foce III / Reed 3p
- Clearaudio Master Innovation / TT2

I can't see any special processing here. In the horizontal direction, a plastic bushing takes over the guidance, which runs oil-lubricated against the polished surface of the plate axle. Simple in principle, but I'm pretty sure that there are a lot of pitfalls in the details.

The motor, which sits on the right, drives the platter via a soft rubber flat belt. An equally unadorned thin and ultra-light foam mat is used on the plain platter. Operating the motor is done in a pleasingly simple manner: If you press one of the two speed selection buttons, nothing rotates at first because only the air supply is put into operation, and the plate now floats. After a second press on one of the buttons, the motor starts moving. By pressing the button for the current speed again, the motor stops, and after two minutes, the compressor switches off. Very logical, very consistent. Two additional small buttons allow fine speed adjustment for both platter speeds.

The plastic bushing in the platter forms the counterpart to the platter axis and only has to absorb horizontal forces

The platter is a plain disc made of fine glass bead-blasted aluminum



The tonearm is connected via a five-pole SME standard cable

Since the plate sits in a recess in the frame, putting on the drive belt is not entirely trivial, but after a few tries, you get the hang of it.

That‘s it to the Modi. Beguilingly simple and perfectly functional. So let‘s turn to the „Thor“ tonearm.

Those familiar with the larger models from the house of Bergmann will not notice too many differences here, either; Johnnie Bergmann has made a very discreet downsizing, which almost does not affect the advantages of the design. With 12 grams of effective mass, it is a medium-weight representative of its genre, which should cope with most of the cartridges on the market today. The overall construction rests on a flat aluminum base bolted to the drive via two slotted holes. The slotted holes are essential because they precisely align the arm with the record. The crucial part of the arm is the cantilever, which forms the tonearm bearing. This is aluminum tubing with a series of fine holes at the top through which the bearing air flows.

The air flows under the disk via the hole next to the bearing axle

The counterweight of the tonearm is attached in a decoupled manner

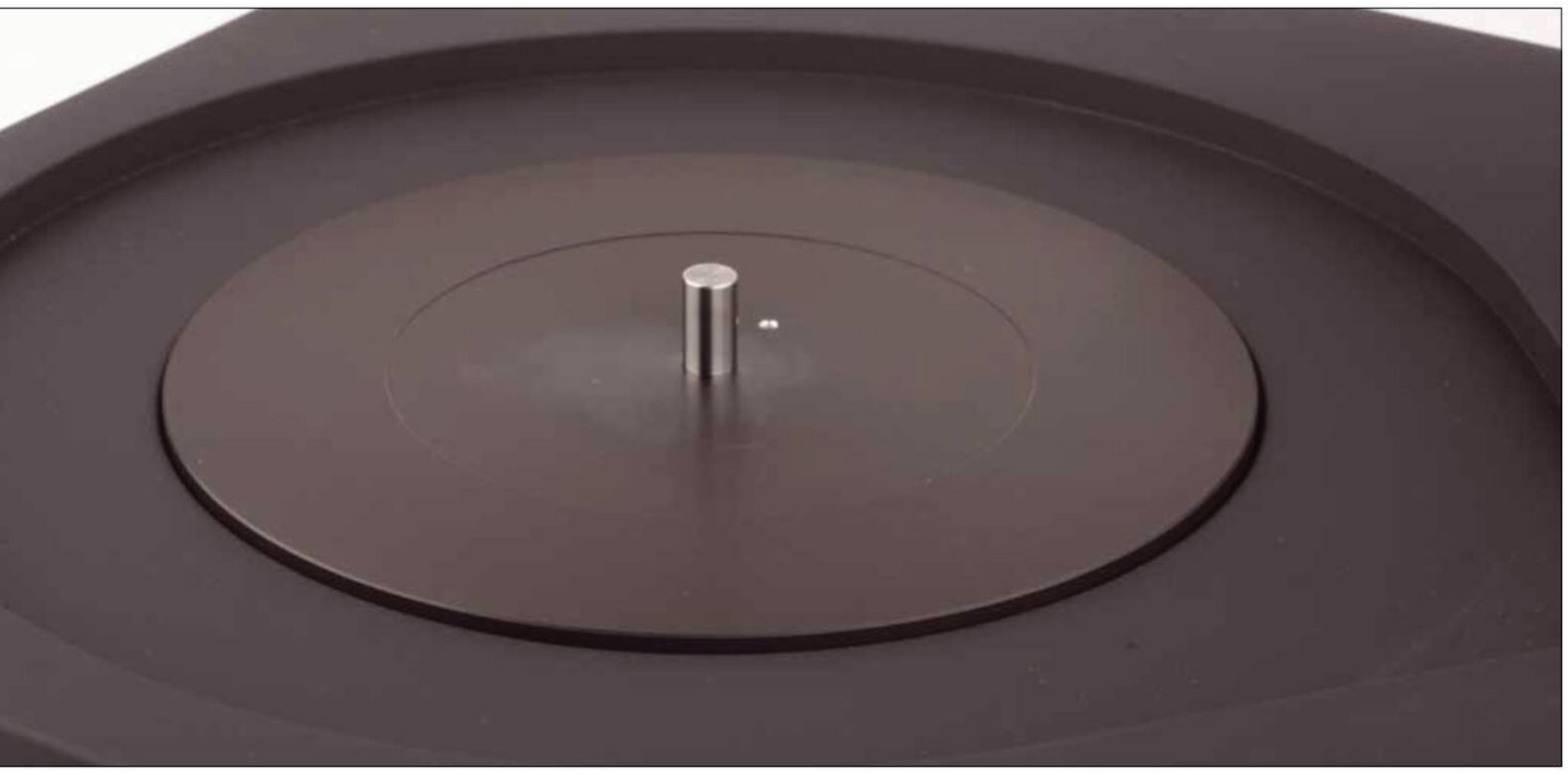
The corresponding counterpart, which is also a cylindrical aluminum sleeve, is located on the moving part of the arm. With the Thor, only a part of the outflowing air contributes to the arm‘s bearing, and the rest is wasted. However, with this solution, you don‘t have to carry a hose through which you blow the air directly into the bearing sleeve - that would be the other variant of such a design. Bergmann‘s solution works excellently and amazes with a few ingenious details. For example, a simple rubber ring prevents the arm from slipping sideways. This ring is pushed inward during transport and locks the arm in place. Very clever. Just like the idea of including a second „floating sleeve,“ with the help of which you can bring the arm exactly into the horizontal position. Since it can glide freely on the air cushion, it accurately indicates whether the setting is correct.

The Thor‘s tonearm tube is a double-walled carbon fiber tube with additional damping. At the front end, it carries an aluminum headshell that differs somewhat from expected standards. There are two pairs of mounting holes for tonearms; the length of the stylus determines the right choice. Bergmann is explicitly against the use of rotatable headshells for stability reasons. However, the pickup mounting holes have enough play to ensure that the cartridge is mounted precisely perpendicular to the groove. There is no provision for azimuth adjustment. Bergmann rightly says that his headshell is exactly parallel to the platter surface, and if you have to mount your stylus at an angle, you should do so utilizing a small rod placed underneath, over which you can then screw the stylus at an angle.

Unusual: Four holes in the headshell for pickup mounting

A sensitive hand is needed when putting on the belt

Compressed air and operating voltages are generated in the well-damped interior of the supply section



The air bearing of the platter turns out to be pleasingly simple

The counterweight is mounted on the back of the continuous arm tube. This is a metal cylinder with a wide recess. The opening is vital as otherwise, the weight could not be pushed over the signal cable, and the center of gravity moves under the arm tube. The weight only contacts the arm tube via three rubber inserts, which provide decoupling. The adjustment of the contact force is simply made by moving the weight, which works very well in practice.

The air that keeps the tonearm in suspension flows out through these holes

The tonearm is adjustable in height after loosening two screws on the bearing block. Also, the parallelism to the platter surface is relatively easy to adjust. The correct alignment of the pickup is done by moving and swiveling the entire tonearm assembly. This is also no problem using the supplied template.

The first tests with the Bergmann I made with the brand new 500 EUR MC „P-1“ from Skyanalog, about which I will have more to tell shortly. The combination ensured that I could only reluctantly switch to bigger cartridges because it was already working fine. The extremely reduced dark jazz of the Mülheim band „Bohren & Der Club Of Gore“ proved to be very suitable for getting to the heart of turntables. The long fading piano strokes unmask „shaky“ motors immediately. Not this one; here, the tones are allowed to decay completely undisturbed. The brittle saxophone has just the right amount of roughness. The combination produces a pleasantly low groove noise; the band‘s music, characterized by many quiet passages, is also a good indicator for this. The jazz „supergroup“ LA4 provided considerably more drive afterward. Bergmann and Skyanalog granted Laurindo Almeida‘s guitar body and force, Bud Shank‘s saxophone expression, while Ray Brown could underlay the whole thing warmly and voluminously. This is playback on an extremely high level; there was hardly anything missing for me. However, the change to the Lyra Etna brought noticeably more fire into the game, especially the saxophone gained even more radiance and body. I can‘t attest any tonal peculiarities to the Bergmann. It turned out to be a high-quality and reliable basis for everything I screwed under the headshell. It excels at bringing out the differences between pick-up cartridges due to its excellent transparency. The air-bearing technology pays off.

Holger Barske

Bergmann Modi / Thor

Price:	**ca. 11,000 Euro**
Distributor:	**WOD Audio, Nidderau**
Phone:	**06187 900077**
Internet:	**wodaudio.de**
Warranty:	**2 years**
Dimensions (B x H x T):	**460 x 150 x 430 (turntable)**
	195 x 200 x 355 mm (air supply)
Weight:	**ca. 23 / 8 kg**

lp

Bergmann
Modi / Thor

International 1/22

» This is a turntable for the lonely island: excellent in terms of sound, an aesthetic dream, and optimized to the maximum functionality.

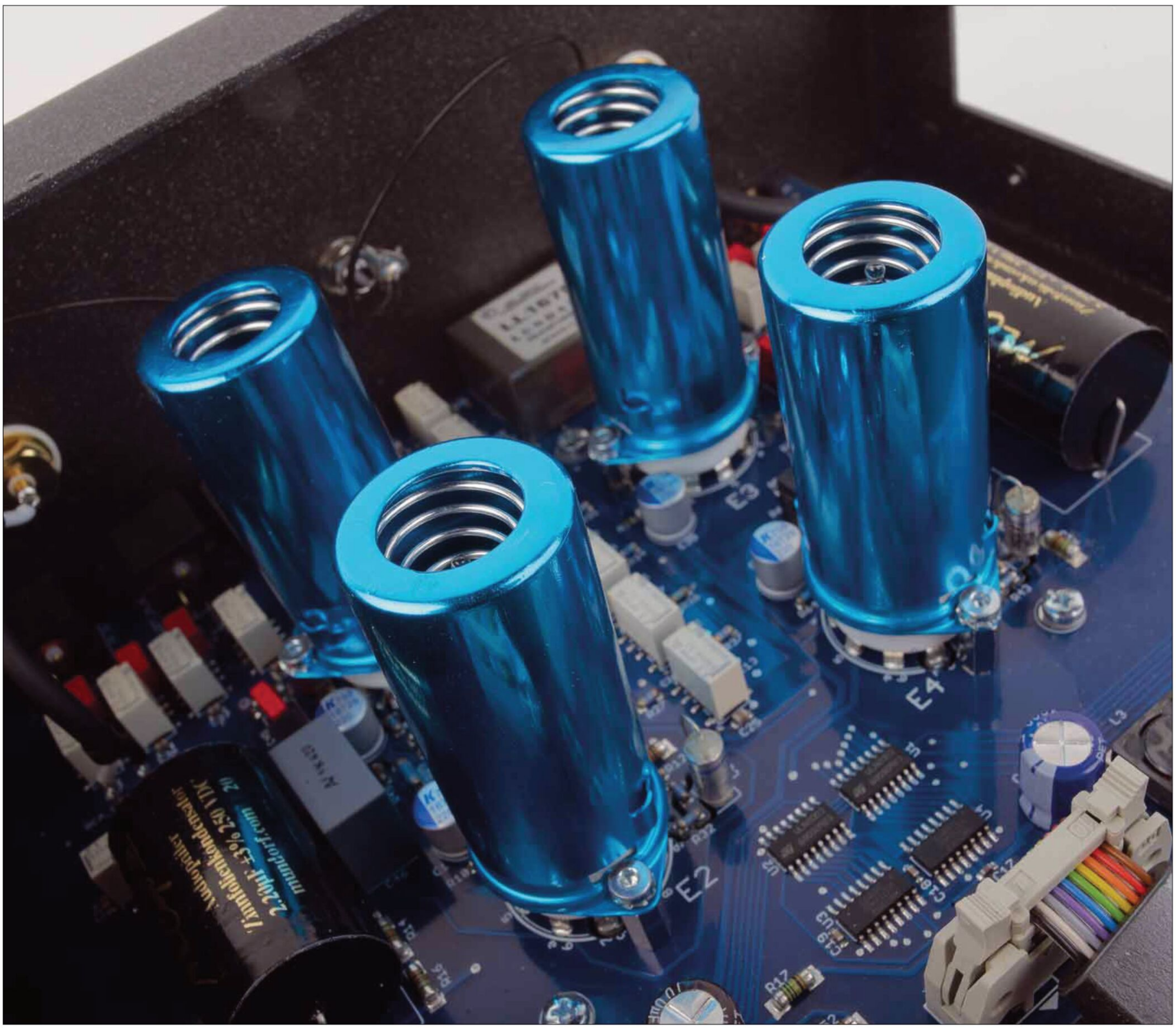
Tube Phono Pre with Common Sense? That's Possible!

I'm sorry to have to start by expressing my enthusiasm from a very "nerdy" perspective. Canor has managed to screw the housing cover of the brand new PH 2.10 phono preamplifier in the only way that makes sense

In many cases, unfortunately, M3 countersunk screws with an Allen key are used. And if they're even slightly too tight, you'll inevitably turn them round when you open the device. I don't know how many of these things I've drilled out in the course of my „career." Yes, dear distributors, that was me when there was another screw missing. Canor is the only manufacturer I know of so far that takes Torx-driven screws at this point, which is worlds more modern and stable and the only correct solution. First impression of the device? Outstanding, the tester is happy.

The start-up of this Canor device also has considerable entertainment value. In this respect, the PH 2.10 does not differ from its big brother PH 1.10. A small red LED flashes when tapping the button below the central rotary knob. After a few seconds, the company name slides into the beautiful yellow-orange dot matrix display from the right. After a while, it clicks inside, and the device is ready for operation, looking forward to working with you on one side and with an MC and an MM cartridge on the other side. Whatever device wants to be booted up with such a significant

The smaller Canor phono preamp gets by with four tubes



Under the shielding cap are double triodes from Electro Harmonix

Teammates

Turntables:
· TechDAS Air Foce III / Reed 3p
· Clearaudio Master Innovation / Universal

Cartridges:
· Skyanalog G-1
· Denon DL-103 Gold Limited

Preamplifiers:
· NEM PRA5

Power amplifiers:
· Silvercore Collector's Amp

Loudspeakers:
· DIY Focal / JBL

Competitors

Phono preamplifiers:
· MalValve preamp three phono
· Clearaudio Balanced V2

power-on delay indeed has a few things to be heated up inside. And that's precisely how it is, as tubes set the scene in the PH 1.10. However, they do it for a very noteworthy 2000 EUR less, but for that, you only get four and not nine of them.

I have to confess: I find myself, again and again, cranking the thick knob like a bit of child, completely senseless, in full awareness that this is not a level control. Depending on whether the MC or MM input is active, you can select the input resistances or capacities. But it clicks so wonderfully rich that the man child wants to play. Much better than switching with two of the four small buttons, which would also do the job. In any case, you can click through eight values more or less without restraint: with MCs, the impedance range goes from ten to 1200 ohms; with MMs, the capacity range is 50 to 840 picofarads. Two other buttons of the more inconspicuous kind switch between MM and MC mode, another dims the display in several steps up to complete darkness, the last of its kind mutes the output. Given the microcontroller, a remote control would undoubtedly be technically feasible without much effort, but it would probably not fit into the given budget anymore.

On the PH 2.10, one MM and one MC cartridge can be operated simultaneously

Emil Brandqvist Trio – Breathe Out

Music

Emil Brandqvist Trio
Breathe Out

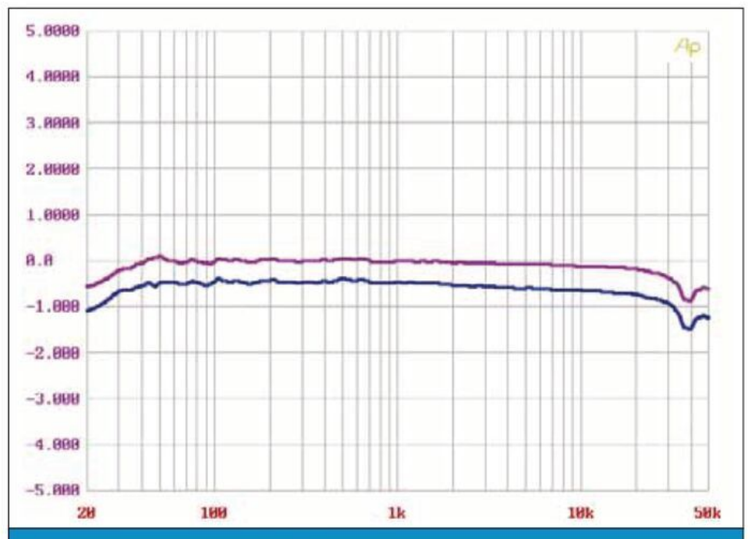
Jackson Browne
Downhill From Everywhere

Thrice
Horizons / East

Bohren & Der Club Of Gore
Patchouli Blue

On the back, there's a pair of extremely solid RCA output jacks screwed to the very sturdy case and two pairs for the input signals. These may be used simultaneously to operate two cartridges on the device. Not necessarily one MM and one MC; connecting a second MC would also be feasible by using an external transformer. Ground terminal? Of course.

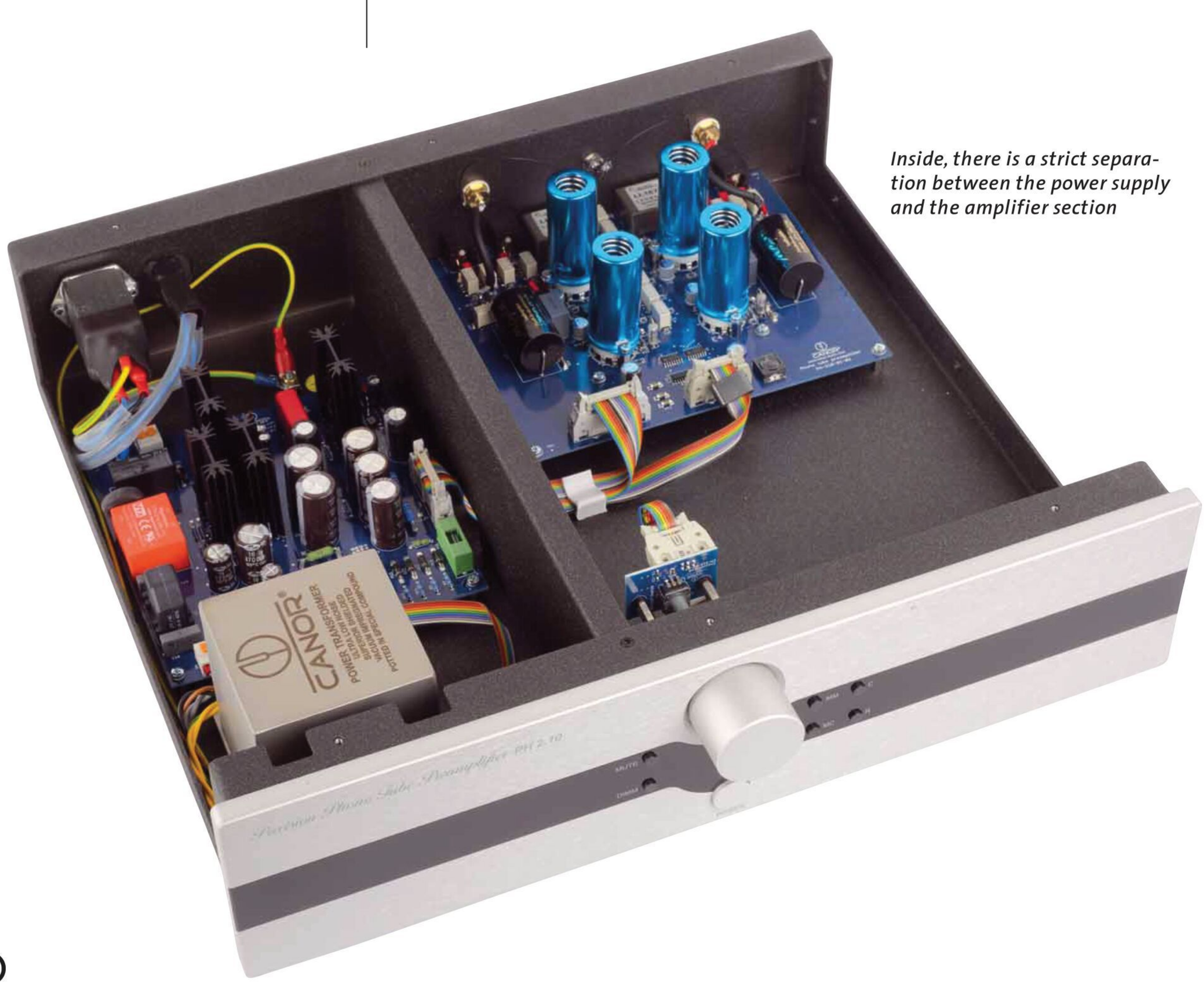
And now? After the initial joy about the 16 fine case screws, one could finally look under the lid—three and a half kilos of black powder-coated steel. No joke. And underneath? Another sheet of metal separates the wheat from the chaff—or the power supply from the signal processing. Everything is a bit more modest than in the top model but still very substantial. The power is supplied by a cube-shaped encapsulated transformer on the left behind the front. The power supply board turns the delivered power into a fare that can be used by the amplifier and control unit. In the top model, a tube regulated the high voltage for the amplifier tubes, but not here. However, there are va-



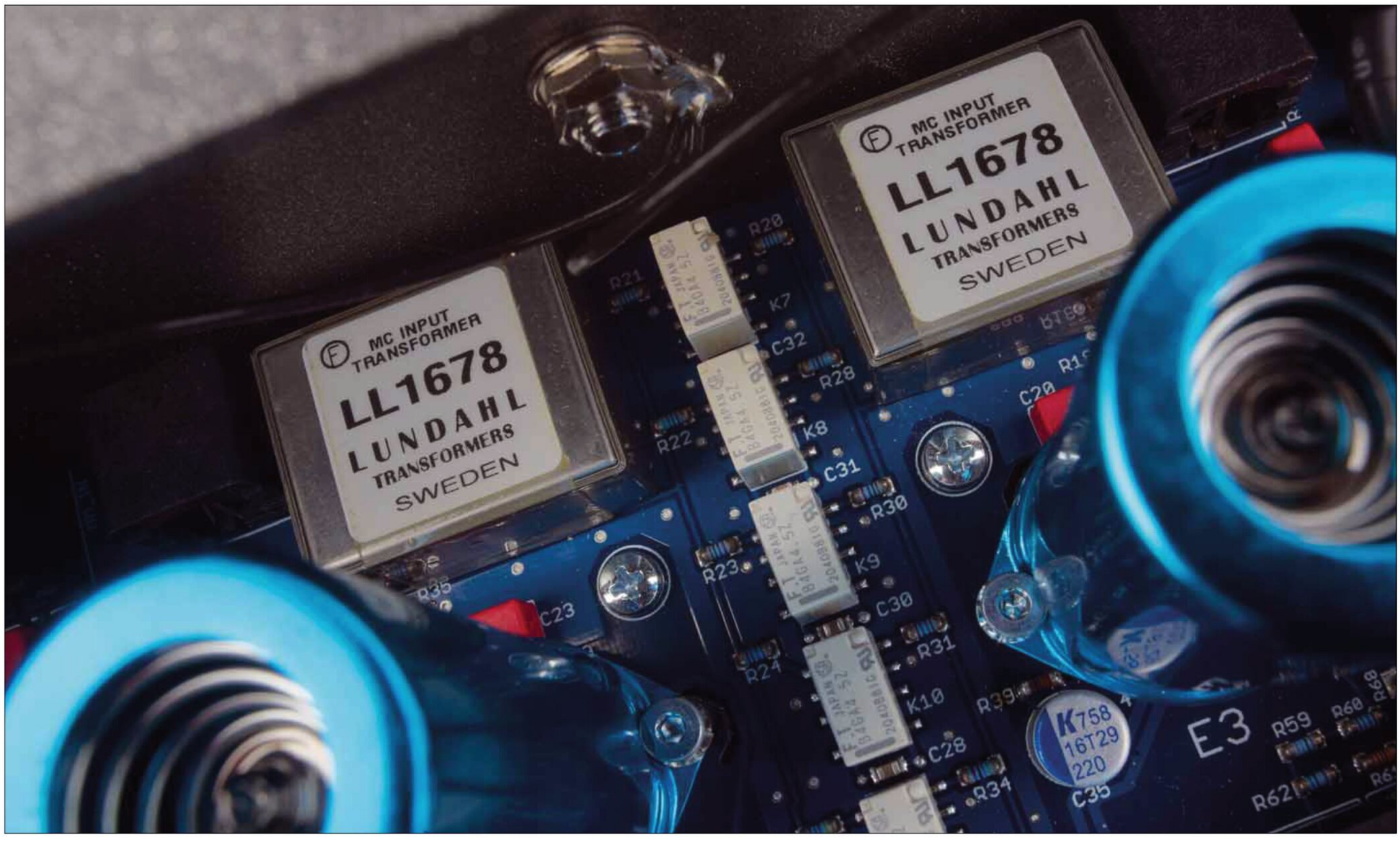
Measurements

Measurement commentary

No problems worth mentioning in the measurement lab. There are a few tenths of a decibel difference in level between the channels, but that is within reason. The transformers show a minimal resonance around 40 kilohertz, which doesn't hurt either. In MM mode, we measured a gain of 46.5 decibels. The impedance at five millivolts at the input is 74.3 decibels(A), the channel separation is 69.4 decibels, the distortion factor at one kilohertz 0.1 percent. Under the same conditions, only with 0.5 millivolts at the input in MC mode, there are 68 decibels of gain (this depends slightly on the terminating impedance) and 67 decibels(A) of extraneous separation, 58 decibels of channel separation, and 0.18 percent distortion. The power consumption of the device is a constant 26 watts.



Inside, there is a strict separation between the power supply and the amplifier section

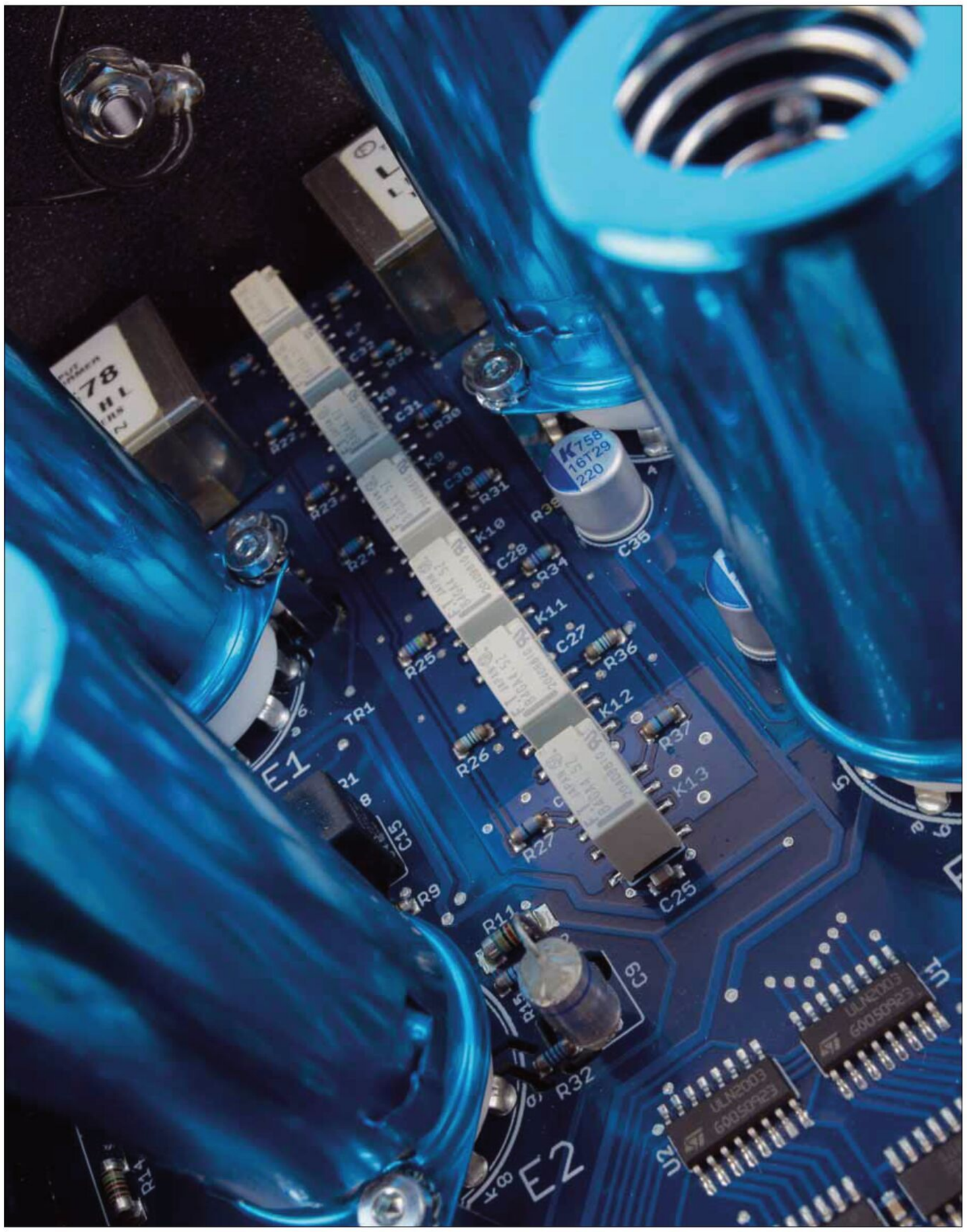


The two transformers raise MC signals to MM level

rious mains filter measures, which, among other things, eradicate the small standby switching power supply. This means that half of the not precisely compact case is already filled with goodies.

We first look directly behind the rear panel at the amplifier board in the neighboring compartment. That‘s where the two transformers are located, which enable the otherwise exclusively MM-capable phono unit‘s MC ambitions. Two Lundahl transformers do the job. These are good transformers with an amorphous core, which could be wired with different transformation ratios. Canor chose the middle variant (1:16), which helps the unit achieve a nominal gain of 47 (MM) and 70 decibels (MC), respectively. Then two double triodes per channel come into play, which are mechanically and electrically shielded by spring-mounted aluminum shielding cups. Two 12AT7 / ECC81 and two 12AX7 / ECC83 from Electro Harmonix

Here, too, Canor installs its trademark: an informative LED display



Lots of relays provide for the parametrization of the inputs

The transformer labors under a shielding hood

are plugged in, undoubtedly solid goods. The passive assembly of the board is interesting: High-quality wired components for the signal-relevant parts - yes, the obligatory Mundorf output coupling capacitors (the really good tin-foil types) are also there - and tiny SMD footers for the control functions. After all, 17 relays want to be operated here, voltages sifted directly on site, and control signals prepared.

According to the manufacturer‘s website, the four triode systems work as four amplifier stages - without negative feedback, in A mode, of course. A subsonic filter is supposedly placed between the first two stages. However, it is set so low that it completely escapes our frequency response measurement, which starts at 20 Hertz. The passive RIAA equalization sits between stages two and three, built with fine polypropylene and polystyrene capacitors. Everything fits and shows care and expertise. We can calmly screw the lid back on (no problem here ...) and devote ourselves to the crucial question of how far the small Canor can follow the thunderbolt-like reputational footsteps of the big model.

For this purpose, I connected the Slovakian 14-pounder with the Clearaudio Universal‘s Skyanalog G-1 and accelerated the Master Innovation‘s massive plate tower. There is gratifyingly little residual noise in the speaker. I would not have bet on that with a phono preamplifier with four triode systems in a row plus a transformer. It is also an advantage for the PH 2.10 that it amplifies MC signals relatively high and that one can leave the volume control quite far to the left with typically loud cartridges. And nevertheless: When the level control is set to the right, there is not even the slightest hint of hum. I don‘t often have that right after plugging together.

We listen to the Emil Brandqvist Trio with their new album „Breathe Out.“ I quickly find the correct terminating impedance for the cartridge because it can be changed conveniently and quietly (i.e., it doesn‘t crackle) during operation. I ultimately settled on 300 ohms. I like the opulence and fullness in this position. With 80 ohms, it sounds noticeably leaner, also a bit tighter, but for me, the piano has too little body. You can do as you please because that doesn‘t change anything about the extremely fresh and powerful way the Canor acts here. He conveys a decidedly convincing desire for the thing. Piano tones shine, have body and substance. The bass sounds resonant and warm, the strings silky, full-bodied, and entirely without artificiality. The Canor shows that it can also do coarse dynamics when reproducing the fantastic new Jackson Browne album „Downhill From Everywhere.“ The device shakes the ten songs out of its sleeve, highly relaxed, substantial, and punchy. This is how it should be!

Holger Barske

Canor PH 2.10

Price:	**ca. 3,500 Euro**
Distributor:	**IDC Klaassen, Lünen**
Phone:	**0231 9860285**
Internet:	**canor-audio.de**
Warranty:	**2 years**
Dimensions (B x H x T):	**435 x 120 x 405 mm**
Weight:	**ca. 14 kg**

Canor
PH 2.10

International 1/22

» The smaller Canor phono preamp is also a very convenient unit with a powerful, colorful sound that makes you want to listen to records. Superb quality!

ALBEDO
ALBEDO

Designer Box with Substance

It's so pretty; it can't sound good at all? No "real" speakers fit in it; it has too little volume, and anyway, doesn't it break off right at the bottom?

Take it easy with the loudspeaker clichés of efficiency advocates who are not very willing to compromise. There are said to be people who do care that cabinet-sized speaker monsters obscure the daylight in the living room and for whom not only the hopelessly music-enthusiastic part of the family dictates the furnishings. Getting both under one hat has been the holy grail of the speaker industry since the invention of high fidelity. The Italian manufacturer Albedo has something for all shades of the weighting of both aspects in the program. With the imposing Acclara (shoulder height: 1.40 meters), we presented the then-top model two years ago, which requires a certain degree of tolerance in daily use due to its sheer dimensions, despite all the undisputed acoustic qualities. The Aptica MKII is the exact opposite. It is as minimal a floor-standing loudspeaker as a floor-standing loudspeaker can be. Everything about it is Italian design - slim silhouette, exciting curves, lots of convention-breaking. Such a design is not to be had on the junk tables of electronics discounters: The Aptica MKII pair can be purchased from hand-picked retailers starting at EUR 10,650. That‘s the version with a veneered body; if you want the white high-gloss look of our test samples, you‘ll have to invest EUR 13,250. But then you get genuine, handmade piano lacquer for that.

Teammates

Turntable:
· Acoustic Solid 311

Phono preamplifiers
· Musical Fidelity MXVynl

Preamplifiers:
· Cambridge Audio Edge A
· Line Magnetic LM-845 Premium

Competitors

Loudspeaker:
· Klang + Ton Nada

Slomosa – S/T

Music

Slomosa
S/T

Dans Dans
Sand

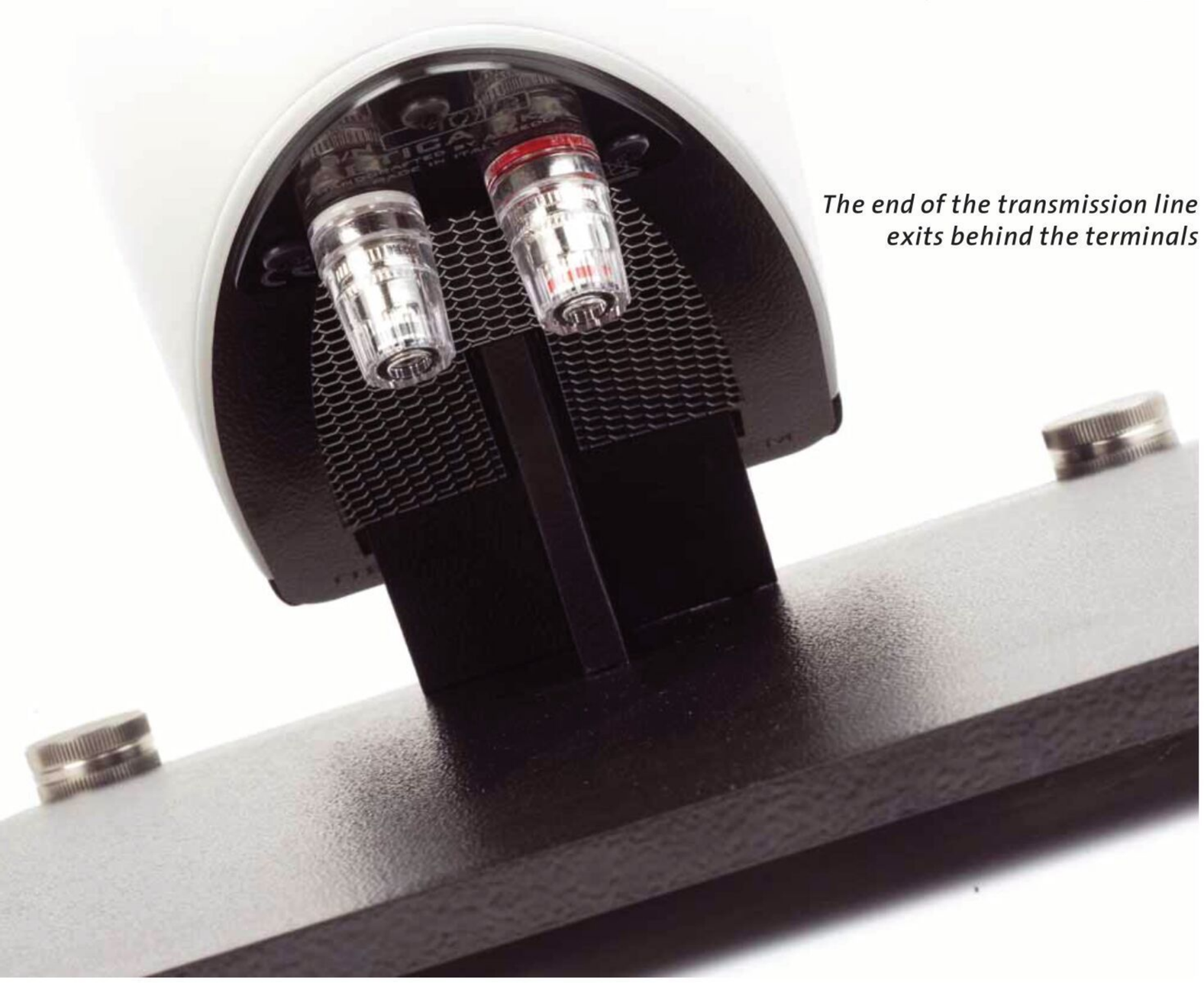
Agusa
S/T

LA4
Just Friends

The manufacturer fights edge diffractions with the „DSD“ system

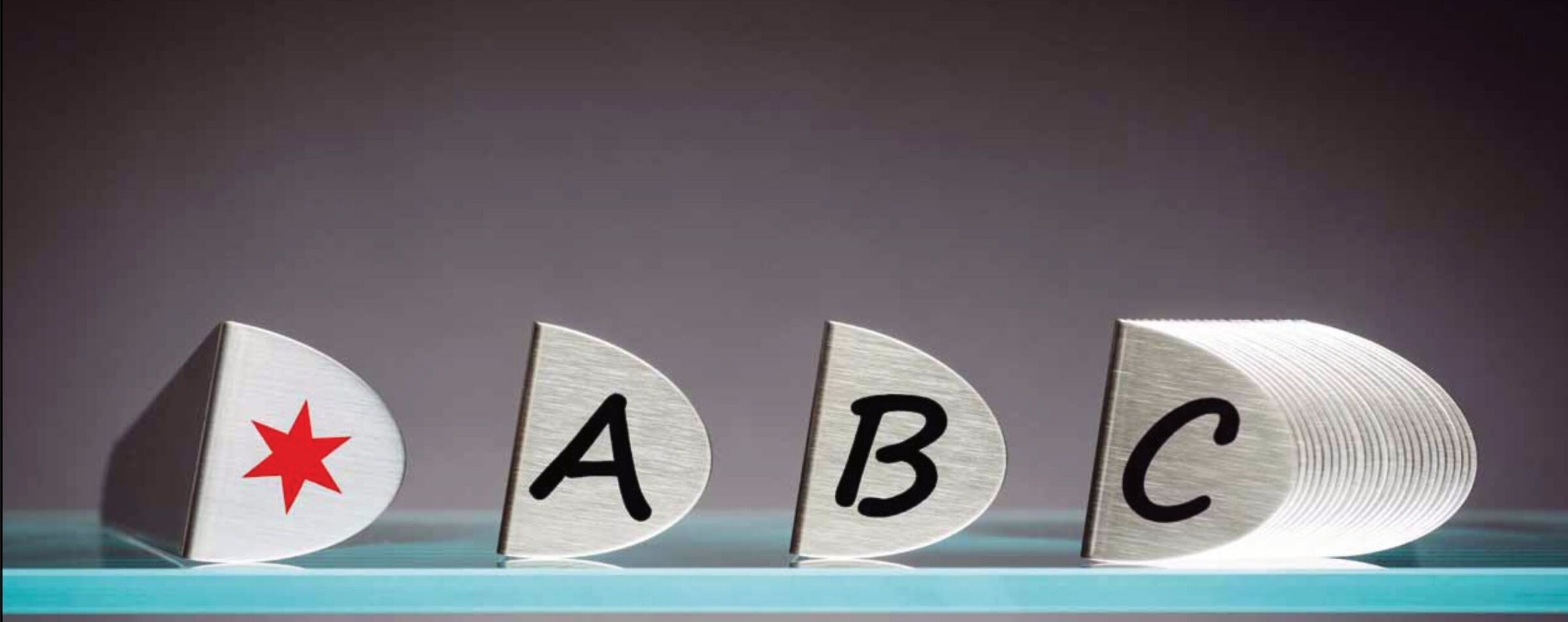
The Aptica MKII is, beyond all design aspects, a two-way floor-standing loudspeaker. Those who suspect a simple bass reflex solution are mistaken. Albedo Audio has the transmission line principle written all over it, which by definition requires a „ pipe „ with a specific length behind the bass driver. That‘s why there‘s no compact shelf speaker in the program of the Adriatic-based manufacturer.

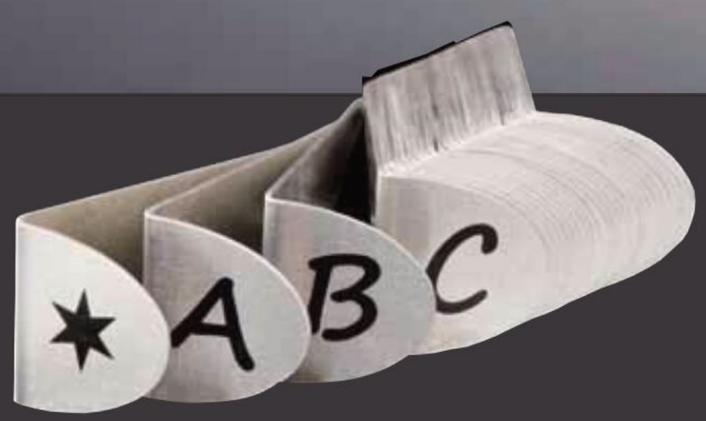
Why doesn‘t this gem fall over? To make matters worse, the downwardly tapering beauty is also clearly tilted backward, which doesn‘t exactly make the static challenges of the construction any smaller. The solution to the riddle is a heavy steel plate screwed to the speaker body via a narrow coupling piece. This works perfectly, guarantees a secure stand, and provides the grand illusion of a floating speaker. The first thing you notice about the speaker itself is the complex body, which is quite a challenge in manufacturing technology. There‘s also something noteworthy to report about the baffle. It is not just a simple board but has a unique wave pattern, ensuring diffuse sound radiation.



The end of the transmission line exits behind the terminals

Two specialists are responsible for sound radiation. They are German-made drivers from Accuton-Thiel with characteristic white cones, a hallmark of speakers with high standards for many years. The white cones are molded parts made of tough ceramics in a process that is still unique, and their stability is legendary to this day. Albedo chose a 15-centimeter-diameter mid-bass driver for the motor of the Aptica





Sort with style

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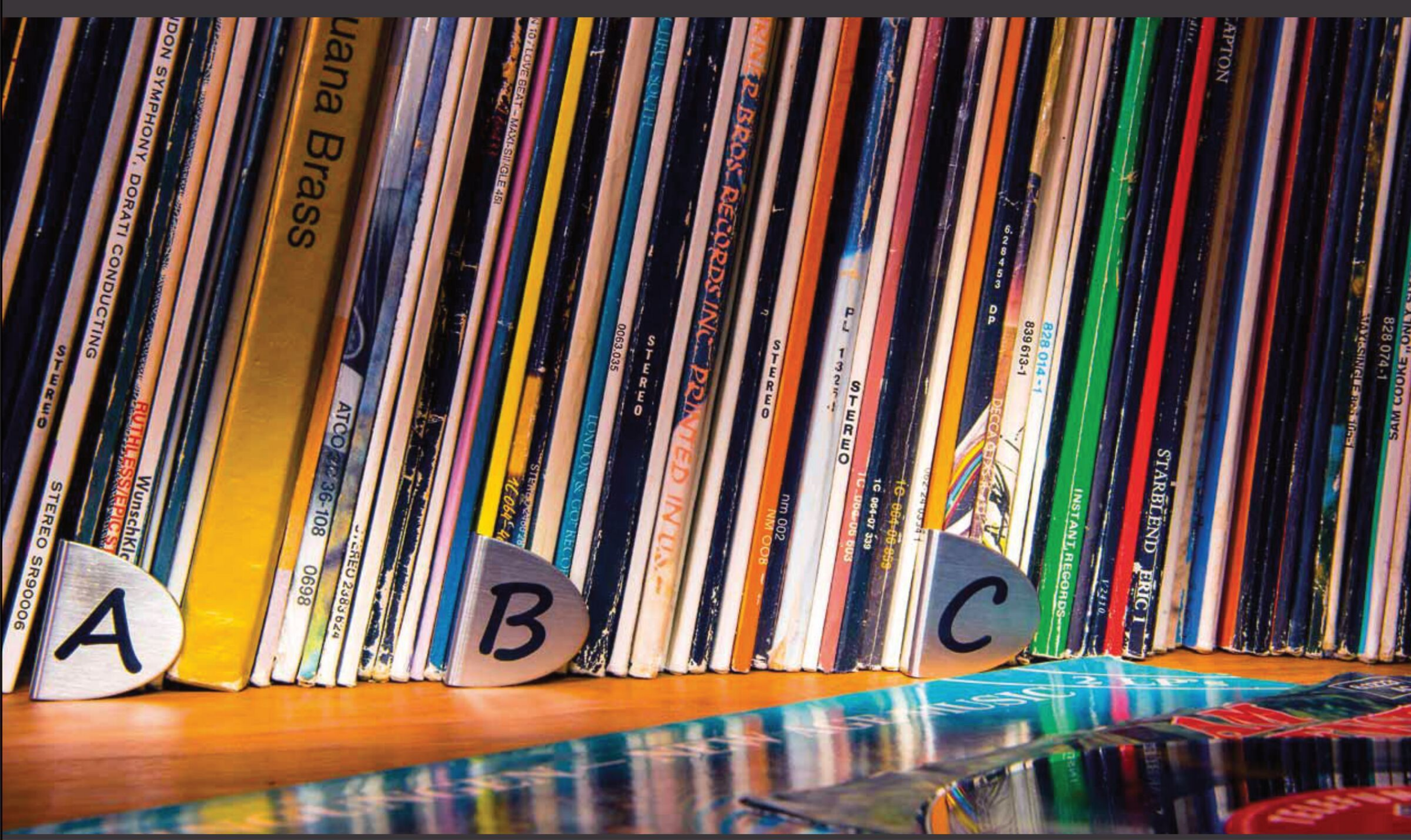


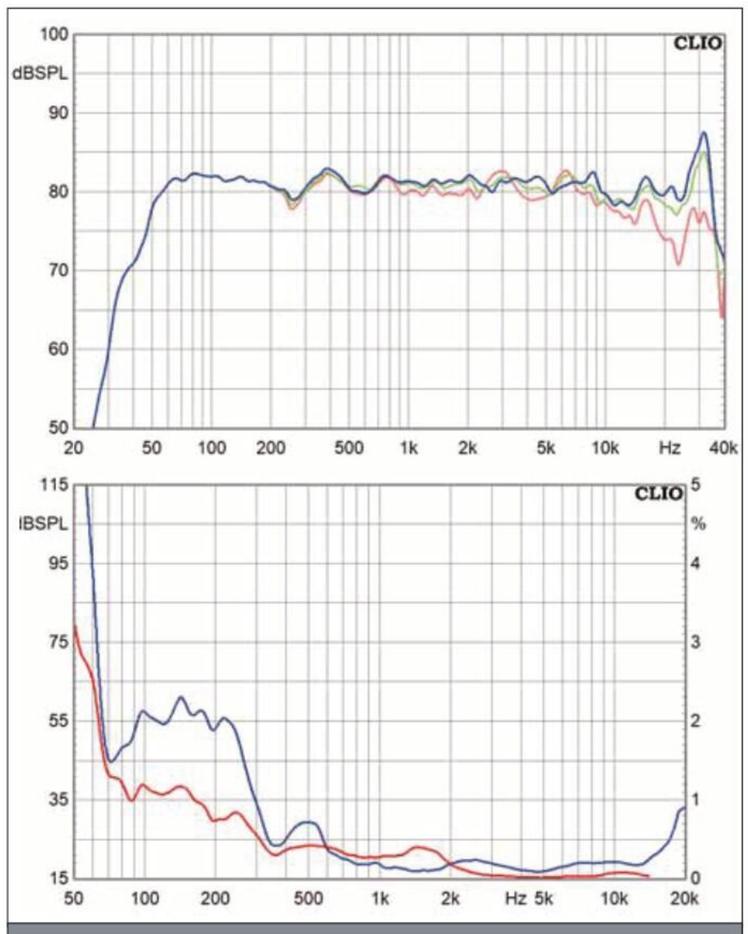
The very special appearance of this speaker is undoubtedly of Italian origin

The heavy steel plate prevents the delicate box from toppling over

MKII. Marrying this driver, equipped with a powerful motor, to a transmission line is not a trivial matter. Albedo is very proud of its in-house fundamental research on the subject. Over the years, it has created effective simulation tools with which the product‘s behavior can be well predicted.

Nevertheless, a considerable amount of work goes into the realization of the enclosure. Not only is it necessary to precisely maintain a very precisely calculated damping of the line using special open-pored polyurethane foam, but so-called Helmholtz resonators also ensure the targeted damping of particular frequencies at strategic points. So there‘s a lot more to the slim body than meets the eye. The delay line exits at the base of the speaker, directly at the connection terminals; a grille protects against harm from outside.

A classic with ceramic diaphragm provides the low tones

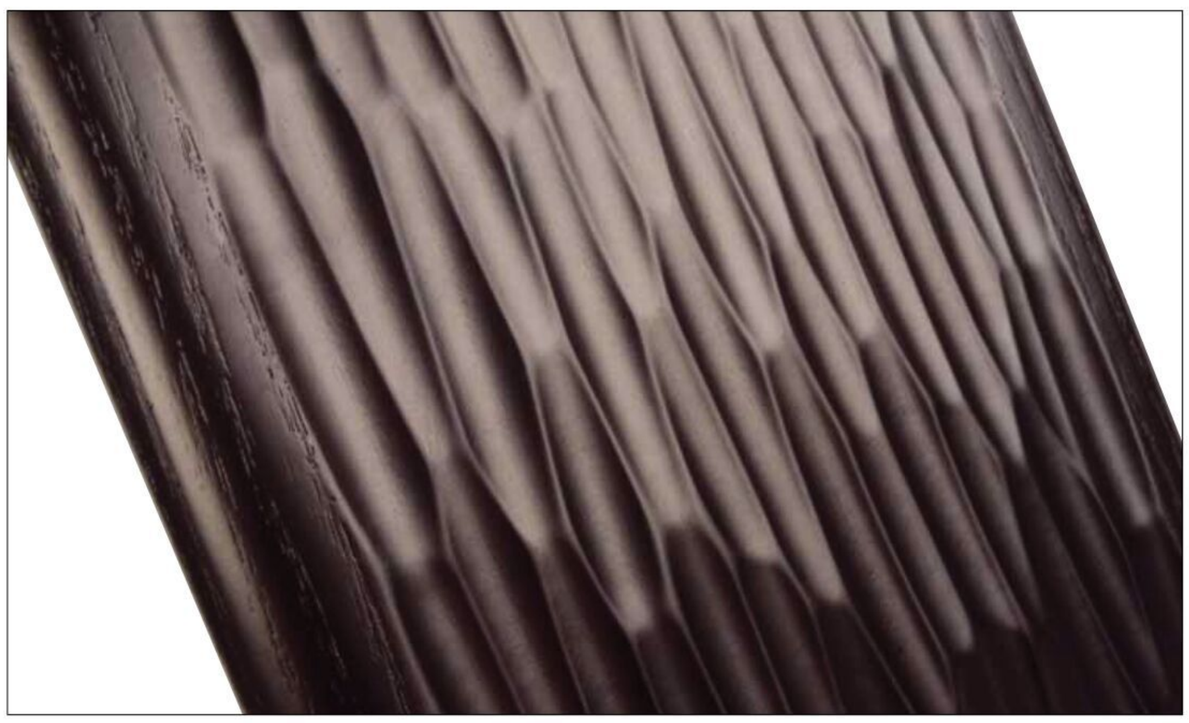


Measurements

Measurement comment

The frequency response of the Aptica MKII convinces with smooth linearity. The bass goes down to just below the 50 Hz mark without any problems. The tweeter only breaks up above 30 kHz, and the omnidirectional sound distribution is excellent. The efficiency of 81 decibels isn't very high, and the impedance rating delivers about eight ohms on average. The speaker distorts very little, even at a considerably loud 95 decibels of sound pressure.

Above the mid-bass driver, there is a ceramic dome tweeter with a diameter of 25 millimeters, also from Accuton-Thiel. This is another driver that has been tried and tested for many years, and its performance in the speaker is enhanced with a trick. The manufacturer rightly identifies edge diffraction as a problem for clean sound radiation. The lateral cabinet edges mutate into phantom sound sources and can thoroughly ruin the linearity of the radiation.



The profiling of the baffle should provide sound radiation advantages

The petite box doubtlessly is an eye-catching appearance

The 6.5" woofer proves to be a suitable motor for the transmission line cabinet

The crossover filters shallowly and attenuates diaphragm resonances

The back is also delightful: The Albedo is all-round attractive

To avoid this, the manufacturer came up with its „DSD (Diffraction Shaping Device).“ These are cavities to the left and right of the high range in the baffle, covered with specially perforated metal sheets. These sustainably prevent unwanted sound propagation over the baffle so that the problem does not arise at all.

The crossover filters the sound components for both drivers relatively flat and ensures the suppression of high-frequency membrane resonances. The measurement technology proves the various artifices in the development right - the Aptica MKII measures very well.

The distributor warmly advised me to operate the small Albedo with powerful electronics, which is certainly not wrong considering the low efficiency. So no tube? Actually not. But it would need stability. It would also be nice to have a powerful switching amplifier. I can confirm that the Aptica MKII gets along very well with powerful amps. The powerful Cambridge integrated amplifier demonstrated this impressively in the listening room of the publishing house. Already here, the accomplished bass tuning of the loudspeaker was noticeable: very well-contoured, with a lot of feeling for low-frequency colors. Transmission lines boom? Not this one. I found this bass solution to be decidedly disciplined and pleasingly complete for such a strongly design-oriented speaker. Tonally, the Italian did not show any signs of weakness. It sounds just as balanced as the frequency response description suggests. Once again, I noticed that the Accuton ceramic domes are extremely disciplined fellows, especially in this incarnation. They produce sibilants completely uncolored and present themselves as „audiophile“ transducers in the best sense: What you put in, you get out.

And how was that now with the tube mode? Yes, it is possible. At least, if you have a large caliber like the Line Magnetic monster at the terminals, which can be admired elsewhere in this issue. The switchable negative feedback of the device proves to be a true savior: Operated with maximum feedback, we have found the dream amp for the Albedo. The soundscape detaches itself from everything tangible in an almost uncanny way, floats completely detached in space, and sounds mighty expansive. The whole thing has „drive,“ too: we are listening to the self-titled album of the Norwegian electric guitar artists from Slomosa, and, my dear man - the elegant box performs even this with conviction. The low tuned guitars grind perfectly, the mighty organ of the frontman sticks out of the wall of sound well understandable. Much more than just a pretty face? Definitely!

Holger Barske

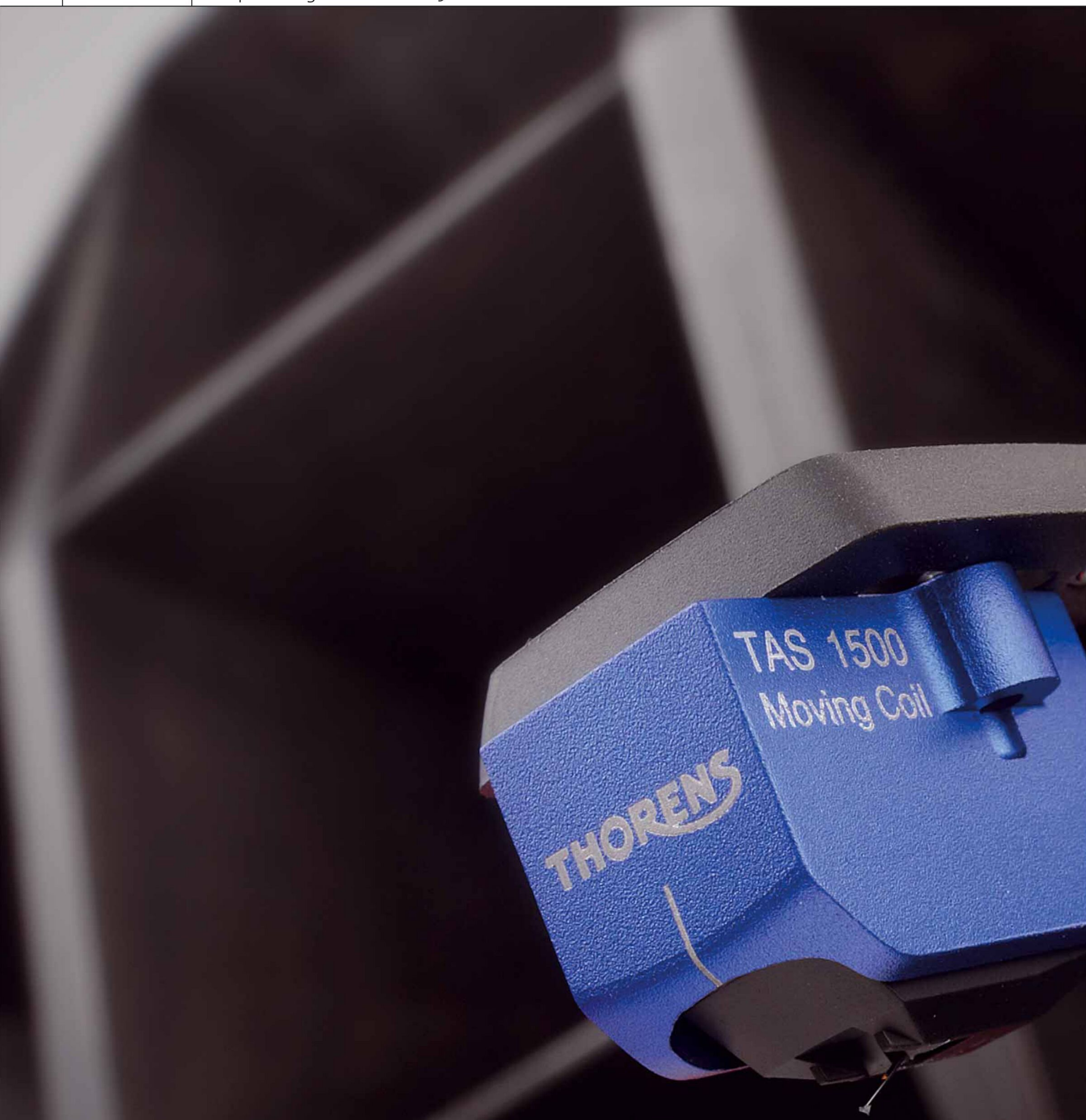
Albedo Aptica MKII

Price:	**ab ca. 10.650 Euro**
Distributor:	**Orange Audio, Fulda**
Phone:	**0171 5387393**
Internet:	**orange-audio.com**
Warranty:	**2 years**
Dimensions (B x H x T):	**255 x 1020 x 510 (with foot)**
Weight:	**ca. 19 kg**

Albedo
Aptica MKII

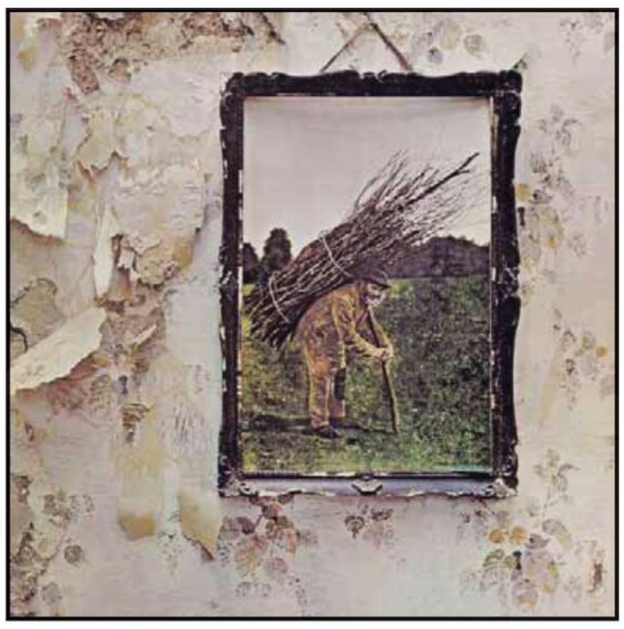
International 1/22

» Design and sound go hand in hand impressively with the Antica MKII. The petite Italian sounds balanced, has substance, and delivers excellent spatial imaging.


TAS 1500
Moving Coil
THORENS

The "Fits Always" MC

Under new management, the long-established turntable manufacturer Thorens is developing more and more into a full-range analog supplier. The latest indication of this: the third cartridge in the product range



Led Zeppelin – IV

Music

Led Zeppelin
IV

Bohren & Der Club Of Gre
Patchouli Blue

LA4
Live At Montreux

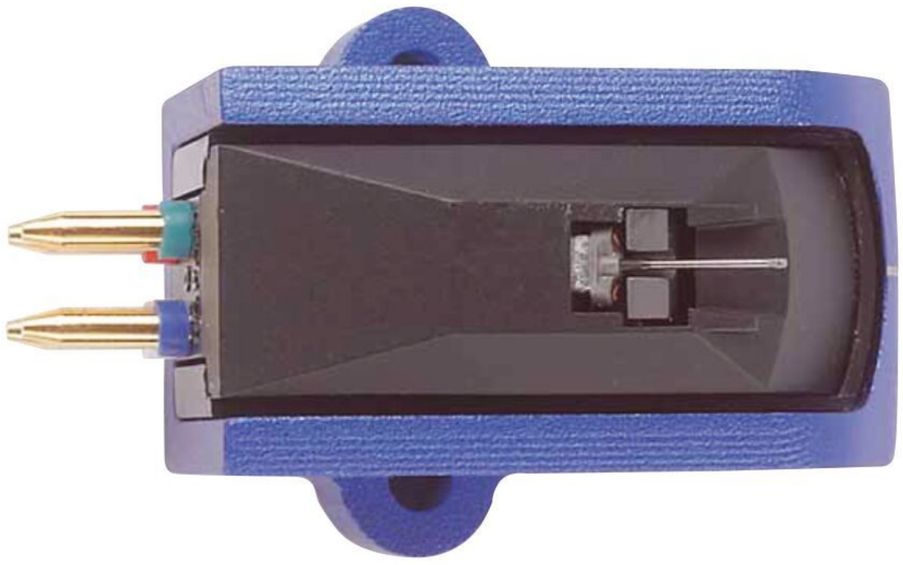
Super Moon
S/T

And it's not that the first two Thorens pickups of the modern era were something like „must-have" products. Quite the opposite. With the TAS 1600, they have a serious weapon in their MC arsenal, which has a say in the audiophile Upper Class. The SPU TD 124 is a genuine SPU that is not available from Ortofon, and that takes away the rough edges of the concept to such an extent that „normal" people can be trusted with it. The previous cartridges always seemed to be designed to match a respective in-house turntable, as the type designations also indicate: The TAS 1600 is supposed to feel particularly at home in the TD 1600, the SPU TD 124 in the TD 124 DD, of course. And now there's the brand new TAS 1500, which you quite rightly assume is accompanied by the appearance of a new turntable called TD 1500. It is already here and waits for an intensive examination; friends of classic Thorens components may look forward to this turntable in particular.

The TAS 1500, like its big brother, is a typical low-output MC system. One of the more agreeable differences is the retail price: While the TAS 1600 currently sells for just over EUR 1200, the TAS 1500 is already available for EUR 800. Both come in otherwise identical cases but can be easily distinguished due to the different colors.

Thorens has the pickup manufactured in Japan by Audio Technica, undoubtedly one of the best addresses for such work. On the one hand, they can rely on decades of know-how. On the other hand, Audio Technica is one of the few companies that can manufacture cartridges automated and achieve series consistency.

However, Thorens' owner Gunter Kürten didn't just reach into the Audio-Technica shelf and have his logo printed on one of the well-known models from the portfolio. Once again, the industrial designer Helmut Thiele, whose work in the analog world we



A "Micro Line" diamond sits at the tip of the cantilever

Even the packaging perfectly matches the sleek aesthetics of the pickup

The aluminum case is a specialty that Thorens prescribed to the Japanese manufacturer

encounter from time to time, acted as an authority in between. He has also been making his own turntable and tonearm for some time now - we covered this in our report. Helmut Thiele is responsible for the fact that the Thorens MCs are dressed in such snazzy aluminum suits. And since the Japanese understand „tradition“ in such a way that they still insist on the unspeakable stylus mounting with through bolts and nuts that have to be held down, I am grateful to Helmut for the fact that TAS 1500 and TAS 1600 are supplied with contemporary integrated mounting threads.

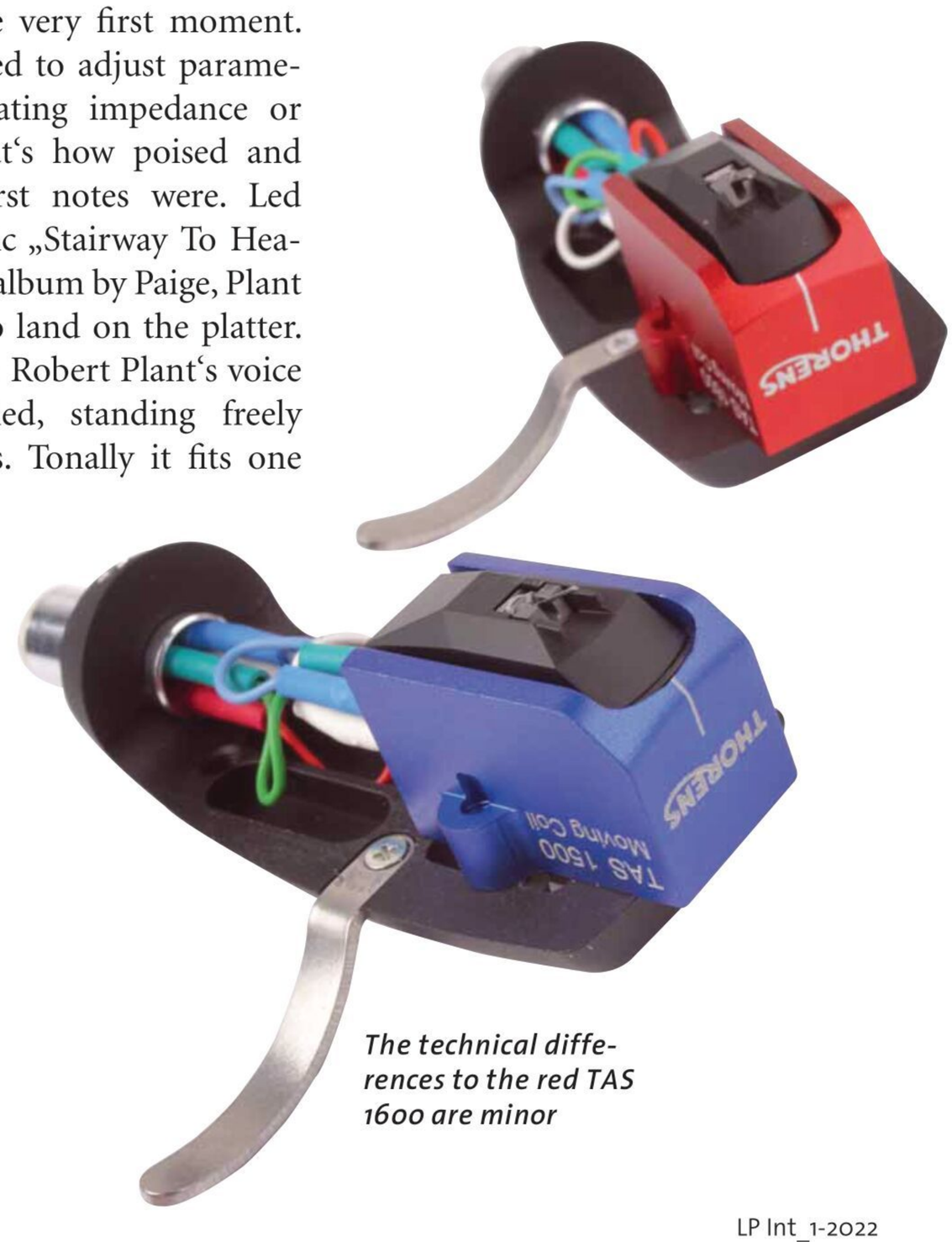
If you compare the spec sheets of the two models, only very few technical differences can be found. Namely the case color and pickup diamond. Everything else seems to be identical. With the experiences made in the listening test in mind, I now dare to claim: The TAS 1500 is quite deliberately designed as a somewhat more good-natured alternative to the TAS 1600, and for this, it did not need many changes.

The intended home of the TAS 1500 is actually the headshell of the new Thorens TP 150 tonearm, but that is by no means a must and will also be tried out towards the next issue. With a needle compliance of 20 µm/mN static and 16 µm/mN dynamic, the stylus is not picky with its accommodation. It should feel comfortable in pretty much any tonearm that is not exceedingly heavy and stiff. The other parameters are also up to standard. A recommended contact force of 20 millinewtons, an electrical termination with 100 ohms – perfect average values. The generator resistance of 12 ohms is in the usual range but a bit high for a 100-ohm termination, so you have to experiment a bit. Incidentally, the TAS 1500 owes this resistance to windings of high-quality „PCOCC“ copper, the legendary single-crystal material, which is also said to have excellent sound properties in the cable sector.

A stylus cantilever made of solid boron is responsible for moving the coils in the TAS 1500, which is indeed not a matter of course for a system in this class. A diamond with a „Micro Linear“ cut was mounted at the end of the rod. This is a refined variant of the classic elliptical diamond, which is considered good-natured but still blessed with good tracking values.

The assembly of the TAS 1500 proves to be unproblematic due to the numerous straight edges on the body. Needle and stylus cantilever are assembled and installed precisely so that the adjustment does not pose any difficulties. The correct position in the Reed 1X was quickly found so that nothing stood in the way of listening pleasure.

The blue unit played to the point perfectly naturally from the very first moment. I did not feel the need to adjust parameters such as terminating impedance or tonearm height. That‘s how poised and well-balanced the first notes were. Led Zeppelin‘s uber-classic „Stairway To Heaven“ from the fourth album by Paige, Plant & Co. was the first to land on the platter. And it sounded great: Robert Plant‘s voice sounds finely chiseled, standing freely between the speakers. Tonally it fits one



The technical differences to the red TAS 1600 are minor

Teammates

Turntables:
- TechDAS Air Force III / Reed 1X
- Clearaudio Master Innovation / Universal 9“

Phono Preamplifiers:
- Linnenberg Johann Sebastian Bach
- MalValve preamp three phono

Preamplifiers:
- Linnenberg Georg Philipp Telemann
- NEM PRA-5

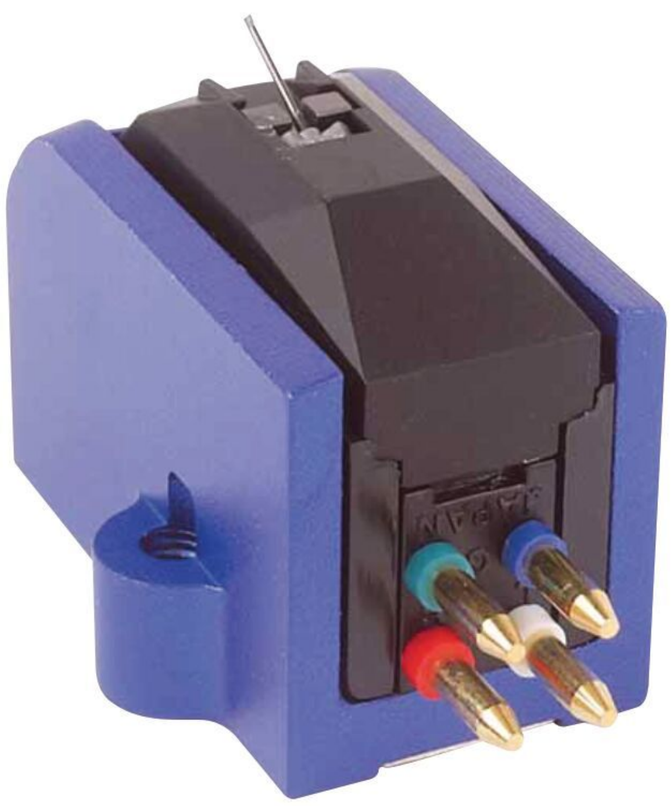
Power Amplifiers:
- Linnenberg Georg Friedrich Händel
- Silvercore Collector’s Edition

Loudspeakers:
- DIY Focal / JBL

Competitors

Pickup Cartridges:
- Avid Reference Ruby
- Skyanalog G-1

The TAS 1500 guides its diamond on a boron cantilever



The connection is made via the usual color-coded connector pins on the rear panel

Thorens has the pickup manufactured by Audio Technica

hundred percent, which also applies to the legendary flute the title has made presentable in rock music. The acoustic guitar sounds peaceful, detailed, pleasant, solemn. Perfect. That's exactly how it should be. It becomes more expansive, dramatic, and energetic as the song progresses.

Yes, of course, we all know the title very well, but with the TAS 1500, I find myself getting particularly intensely familiar with the merits of the piece. It simply sounds strikingly intense and emotional. The TAS 1500 shines with its absolute unity, not with top performances in individual disciplines. Even with the minimalists of „Bohren & Der Club Of Gore," the system proves to be an empathetic mediator of the musical atmosphere. The great latest studio album „Patchouli Blue" is served by the sampler with noblesse and overview. The saxophone sounds insistent, voluminous, but never aggressive.

The piano background is peaceful, warm, and catchy. The percussion cymbals set delicate dabs with just the right amount of radiance. I miss exactly nothing here, quite the opposite: This is a sound image that captivates in an unspectacular and natural way - fantastic. This also works in a heated live atmosphere, as the gentlemen of LA4 proved in Montreux in 1979: With the Thorens, it sounds haunting; the sound makes it easy for listeners to stay with the action and just let themselves be carried away.

Holger Barske

Thorens TAS 1500

· Price: ca. 800 Euro
· Distributor: Thorens, Bergisch-Gladbach
· Phone: 02204 8677720
· Internet: thorens.com
· Warranty: 2 years
· Weight: ca. 8.2 g

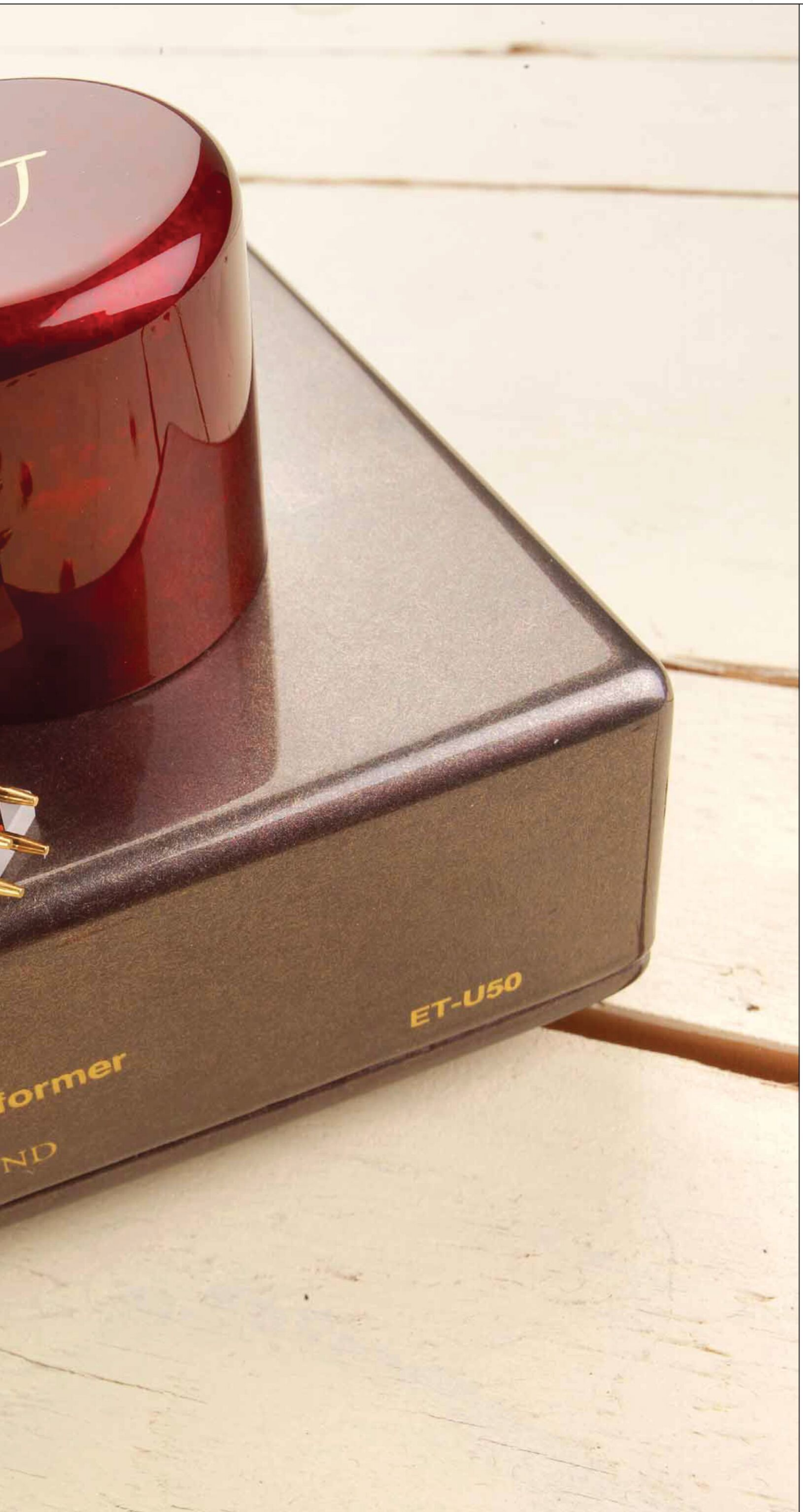
lp

Thorens
TAS 1500

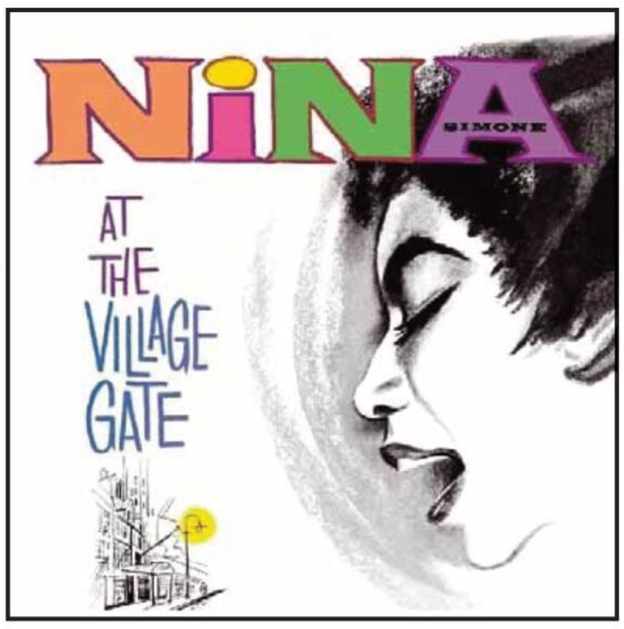
International 1/22

» The TAS 1500 is a superlative-free but utterly coherent cartridge that generates a tremendously inviting and intuitively captivating sound. One of the best all-rounders ever!

Fine Japanese Style



With Etsuro Urushi, we present to you another Japanese manufacturer of treasures for analog playback, which, at least for us, has flown a little under the radar until now. This may be because the products are not intended for analog beginners: The smallest cartridge in the Japanese program, the Etsuro Urushi Cobalt Blue, is priced at EUR 4,000, while the top-of-the-line "Gold" model is well into the five-digit range. Our test model, the Bordeaux, also costs a hefty EUR 6,700. In addition, the only transformer in the program, a gem called ET-U50 - which sounds downright mundane compared to the cartridges. At EUR 3,650, however, it also plays in the luxury segment.



Nina Simone – At The Village Gate

Music

Nina Simone
At The Village Gate

Pink Floyd
Wish You were Here

Gerry Mulligan
The Concert Jazz Band

Chet Baker
Chet

I confess to having chosen the middle model from the cartridge program because it has the same color as the two transformer capsules that protrude from the top of the transformer housing. I think that in these spheres, one can appreciate an overall relaxed optical impression; after all, we're not talking about an – albeit world-famous – 25 EUR cartridge with a frog-green plastic needle insert. So, who or what is Etsuro Urushi? It is a joint project of one of Japan's largest cartridge manufacturers and a distribution company. The cartridge manufacturer in question is called Excel Sound - a name you will encounter in various other places in this issue. The distribution company mentioned is Dai-Ichi Shoji and has been a domestic and export company operating since 1952. Among other things, they are responsible for the worldwide marketing of Excel cartridges. Etsuro Urushi is the cooperation of two long-time business partners who want to enrich the world of record playback with their shared vision after all these years. Responsible for the technical side of things is Excel CEO / CTO Masao Okada, who can look back on more than half a century of experience in cartridge development. And what the older gentlemen have conjured up here is indeed something exceptional.

Like the brand's other cartridge models, the Bordeaux is a typical low-output MC. It delivers an output voltage of 0.25 millivolts at, unfortunately, unspecified speed. That's not very much in any case, but it should be doable with a good modern phono preamp - with the support of a transformer like the in-house one anyway. The low output voltage is matched by the low internal resistance of the generator of only three ohms; apparently, only very little wire was used for the coils to keep the moving mass low. The drive energy is provided by a samarium-cobalt magnet, as is usual for ambitious cartridges from Excel. The dimensions of the generator were kept as small as possible to provide minimal surface area for radiation interference and to maximize the efficiency of the magnetic circuit.

The hardware is housed in a very slim case made of the particularly hard and stiff 7075 aluminum alloy. The casing is largely closed all around, with openings only at the back for the connection plate and at the top, where the mounting flange is attached. The flange is not an integrated part of the case, but a separate, apparently glued plate. The milky-white arrangement is by no means a simple acrylic part, as we initially

The cores of the transformers and the shielding cups are made of MU metal

The high-end transformer amplifies pickup signals 20-fold

assumed. Instead, it is a 2.5-millimeter thick plate made of solid sapphire. Metal threaded bushings are neatly embedded for mounting. The reason for the choice of material at this point is not entirely clear from the English translation of the product text, but it has to do with the energy transfer between cartridge and tonearm.

Sapphire appears one more time in the Bordeaux, namely as the material for the stylus cantilever. A 0.4-millimeter-thick tube made of the hard mineral forms the receptacle for a very small diamond with a Microline cut. Sapphire, by the way, is the same as ruby - the material is only called that when it is red. On the Etsuro Urushi, the stylus cantilever shines bright white. The manufacturer attests to the pickup needle‘s excellent treble pickup, low wear, and less distortion than elliptical or conventional line-contact diamonds.

Surface plating is not uncommon with Japanese cartridges is part of the technical concept. In the case of the Bordeaux, the eponymous elaborate Urushi „treatment“ has been placed in the hands of a specialized traditional service provider, who returns the casing with a very hard surface that should also have sound-wise relevance. Visually, the slightly iridescent dark red is a decidedly classy affair in any case. The Bordeaux‘s connector pins reveal a small, unusual detail: The first half is ground conically. This makes it easier to plug in the connection cables but does not necessarily improve their hold. You need relatively tight-fitting specimens here. The cartridge weighs an astonishingly low 8.1 grams and requires a contact force of 20 millinewtons. The manufacturer does not recommend a termination impedance.

The ET-U50 transformer matches the Bordeaux perfectly, both visually and electrically. The transformers are located in cylindrical towers that protrude from the top of the housing. They have been given the same luxurious surface treatment as the cartridge‘s housing. The transformers boost input signals by 26 decibels, corresponding to a 20-fold amplification. This is a perfect match for the Bordeaux‘s 0.25 millivolt output voltage and should deliver five millivolts to the phono preamp‘s input. The transformers are wound on cores of „EX“ material, which are 78 percent per-

Teammates

Turntables:
- TechDAS Air Force III / Reed 1X / Reed 3P

Phono Preamplifiers:
- Linnenberg Johann Sebastian Bach
- DIY Tube RIAA
- MalValve preamp three phono

Preamplifiers:
- Linnenberg Georg Philipp Telemann
- NEM PRA-5

Power Amplifiers:
- Linnenberg Georg Friedrich Händel
- Silvercore Collector’s Edition

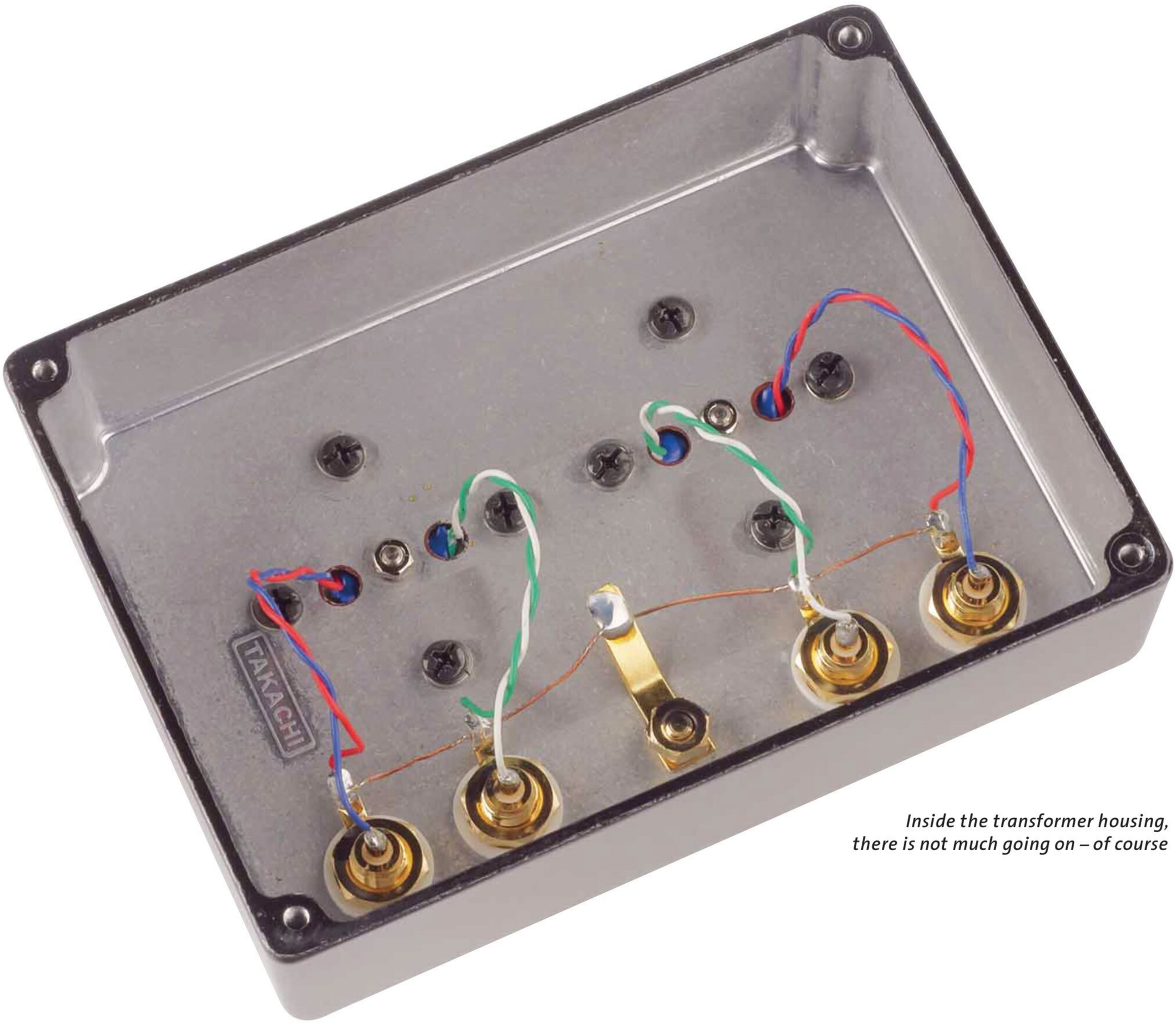
Loudspeakers:
- DIY Focal / JBL

Competitors

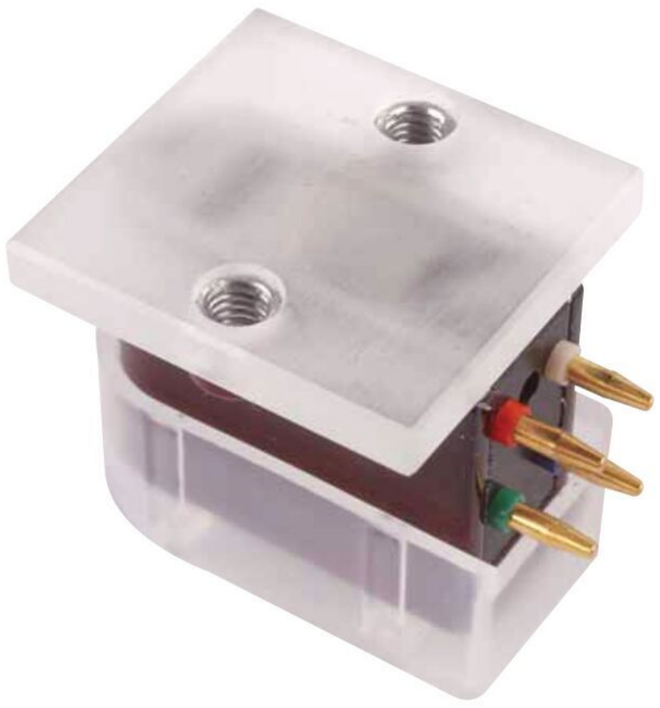
Pickup Cartridges:
- Ortofon Verismo
- Hana Umami Red

Transformer:
- Ortofon ST-80 SE

The housing of the Bordeaux is made of fine 7075 aluminum



Inside the transformer housing, there is not much going on – of course



The mounting plate of the Bordeaux is made of sapphire

malloy, a particularly high-permeability material. The cylindrical housings are made of the same material, and the shielding effect is optimal here. The capsules are mechanically decoupled from the base housing using the highly damping material Sorbothane. The die-cast aluminum housing was also neatly painted by the Urushi specialists but here with transparent lacquer. The high-quality connection sockets and the ground terminal are located on the top of the housing.

The first listening test was done with the transformer solo - it had to compete with the electrically very similar Ortofon ST-80 SE, which was still connected to the system. The differences between the two turned out to be very small; the ET-U50 delivers a minimally stronger bass foundation than the Ortofon, but you have to listen carefully. I would also classify it overall on the very linear and detailed side. The Bordeaux was first allowed to show what it can do in the meanwhile proven manner at the inputs of the Linnenberg phono.

It qualifies as a cartridge of the highest quality already with the first notes. It has a somewhat different character than the fabulous Ortofon Verismo but sounds no less fascinating. For the terminating resistor, I ended up with 100 ohms once again, where I like the balance between

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The connection pins of the Bordeaux are half conical in design

substance and transparency best. The Bordeaux resembles the Hana Umami Red in its colorful and explosive nature, which is not surprising given the origin. One particularly successful „match“ is the voice of Nina Simone. The level of expression that the Bordeaux gets out of the voice on „Nina At The Village Gate“ is undoubtedly among the finest. With the transformer on my tube phono preamp, there‘s a bit more vitality and emotionality, which is quite impressive considering the quite problematic recording.

Does that also work with something as mundane as Pink Floyd? But yes! The Japanese combination presents „Shine On You Crazy Diamond“ with sublime beauty. The intro is wonderfully layered in the room; even in the treble, there is real differentiation. It sounds full, vibrant, and bombastic – that‘s precisely how I want it to sound. Again, I prefer the transformer mode, which simply creates even more atmosphere, it sounds fuller and richer.

Sapphire is also the material of choice for the cantilever

Of course, the price of this combination is prohibitive. But if you ever get to listen to something like this, I recommend it – analog sound on this level is scarce.

Holger Barske

The Bordeaux is the mid-range model of the three Etsuro Urushi cartridges

Etsuro Urushi Bordeaux / ET-U50

· Price: ca. 6.700 / 3.650 Euro
· Distributor: Ibex Audio, Heidenheim
· Phone: 07321 25490
· Internet: ibex-audio.eu
· Warranty: 2 years
· Weight: ca. 8,1 / 530 g

lp

Etsuro Urushi Bordeaux / ET-U50

International 1/22

» Japanese cartridge art at the highest level: colorful, expansive, emotional, vast, and epic. With the transformer and a suitable phono preamp, it's indeed even more convincing.

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Cartridges and more

They play a vital role in getting the sound from the groove, and will play an important part in the next issue: Phono cartridges and matching step up transformers.

Turntables

Some very interesting record players are about to hit the analog world these days – be sure to read our coverage of the most interesting models.

Next issue LP International 03. June 2022

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